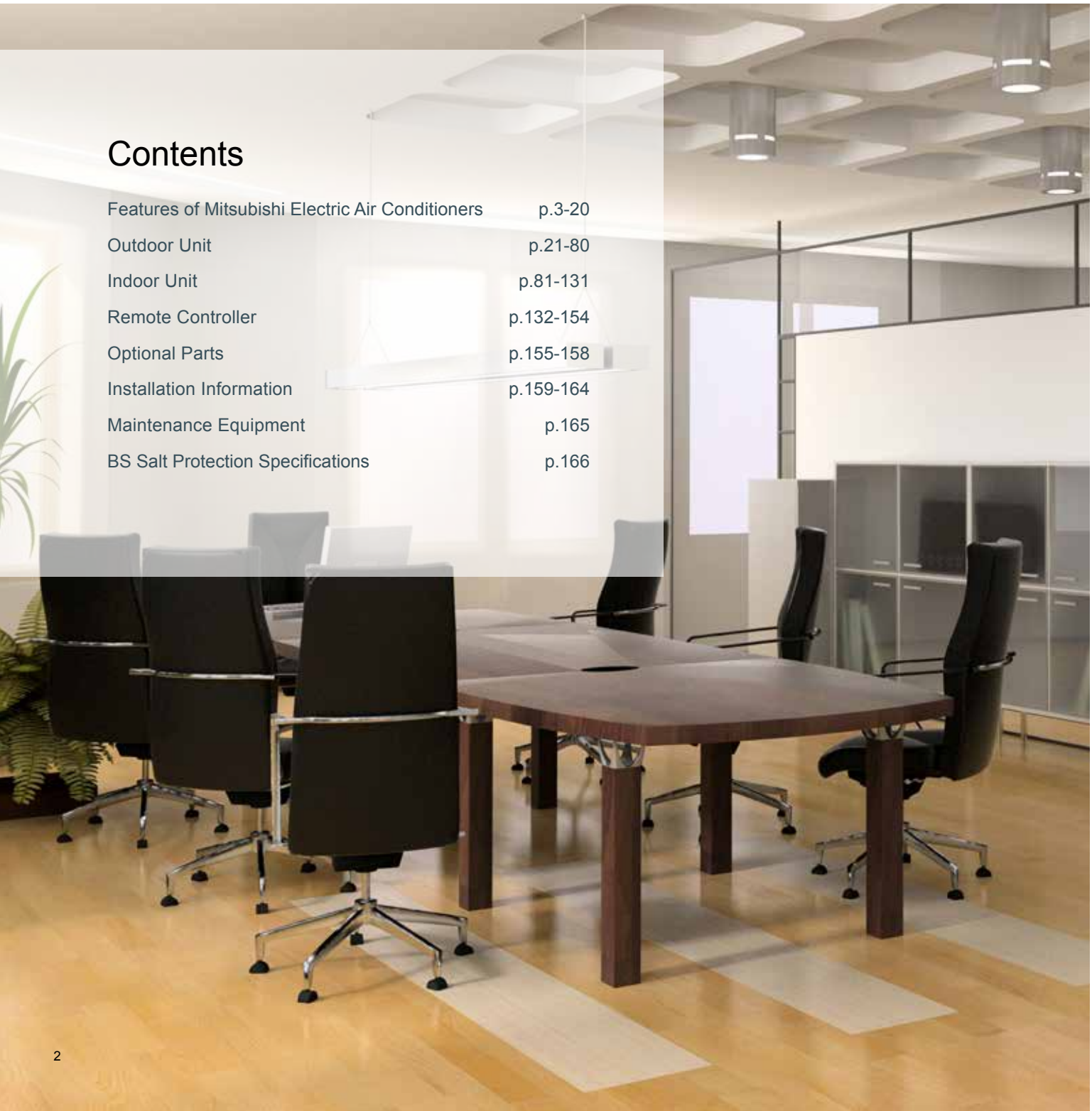
MITSUBISHI ELECTRIC

CITY MULTI

City Multi Product Catalogue

CM14AN-C-NZ

Air conditioning is an ideal way of controlling the temperature, movement and cleanliness of air inside any building, large or small. With today's buildings being so well insulated and increasingly full of electronic equipment, the need for effective climate control is greater than ever. Not only does it cool in the summer months, but air conditioning can also heat, doing away with the need for separate heating systems altogether. More and more people today are enjoying the benefits of comfortable working and living environments made possible with air conditioning.



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Our Latest Technologies

VRF system

VRF stands for Variable Refrigerant Flow. A VRF air conditioning system modulates the flow of refrigerant depending upon the capacity requirements of the building. In its simplest form, a VRF system comprises an air-cooled outdoor unit and a series of indoor units that regulate the air temperature inside an internal space.

Intelligent Power Module (IPM) technology

The CITY MULTI range from Mitsubishi Electric provides precise control of energy input, through utilization of its Intelligent Power Module (IPM) technology. By employing this technology, highly efficient operation is possible with compact units closely matching building requirements.

Inverter driven technology

At Mitsubishi Electric we strive to continually meet the increasing demands of our customers, being the first in the industry to offer highly advanced ‘inverter driven’ systems. Using inverter technology our systems produce just the right amount of output to match the exact requirement of any building. These systems work so efficiently that they don’t waste valuable energy by over-heating or over-cooling, resulting in greatly reduced running costs. Alternative systems that may appear cheaper, can often cost substantially more to run, making Mitsubishi Electric an overall cost effective option.

R410A refrigerant

As scientific evidence points to man-made chemicals for the damage caused to the ozone layer, we only use chlorine-free refrigerants that are safe with zero ODP (Ozone Depletion Potential). Accordingly, our systems require less energy to run, and have a significantly lower indirect global warming potential. In short, we produce the most efficient equipment possible, while helping to protect the environment.

Unsurpassed air conditioning from Mitsubishi Electric

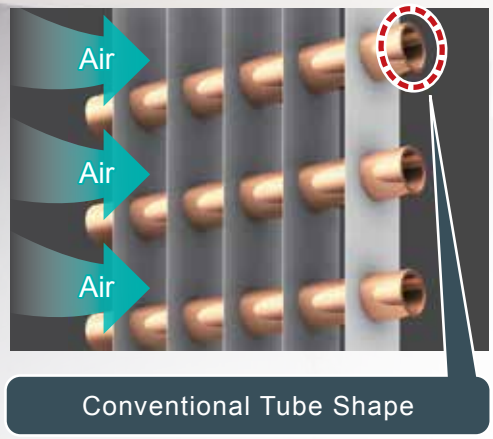
Known the world over, the Mitsubishi brand is a trusted household name associated with a variety of products and services. Founded in 1920, the company known today as Mitsubishi Electric quickly rose to the forefront of the air conditioning industry - a position we still enjoy today. We pride ourselves on offering some of the most energy efficient systems available on the market.

The New EP-YKB/EP-YLM Series

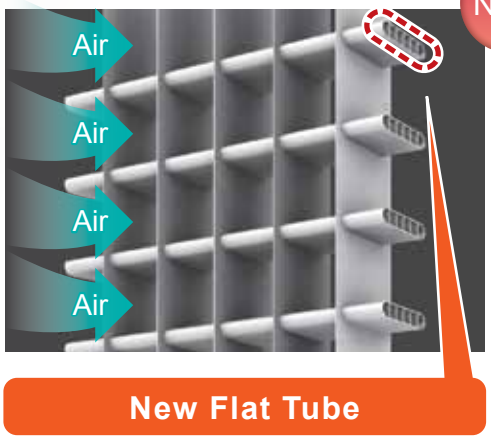
New Technology **(PUHY/PURY-EP-Y(S)LM-A(-BS) only)**

The world-first*1 flat-tube heat exchanger significantly improves heat exchange performance achieving high SEER/SCOP and high air-conditioning capacity.

Conventional Heat Exchanger



Flat-tube Heat Exchanger



(Illustration)

The heat exchanger of the outdoor unit has been drastically changed. Our new model uses a world-first*1 aluminum flat-tube heat exchanger as a heat exchanger of the outdoor unit. The flat tubes can reduce airflow resistance, and the larger number of tubes can be installed in the flat-tube heat exchanger compared to our conventional heat exchanger, which can increase the surface area that is in contact with the refrigerant, and the heat exchange performance can be greatly improved. Our new air conditioner can, therefore, operate at higher SEER/SCOP and maintain the required cooling/heating capacity.

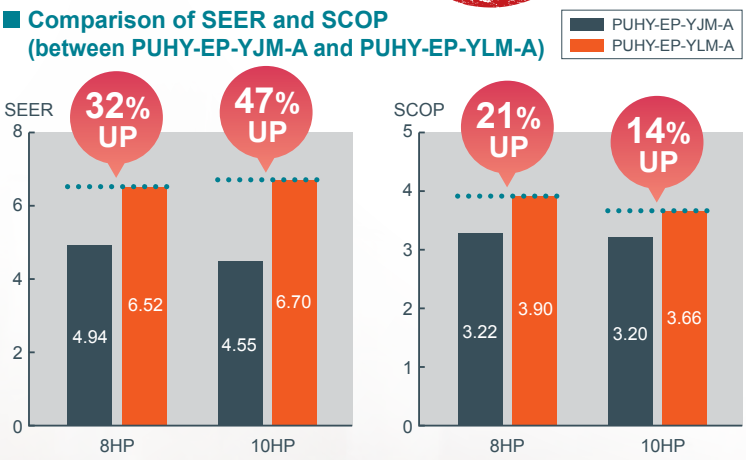
Energy Saving **(PUHY/PURY-EP-Y(S)LM-A(-BS) only)**

Lowest power consumption achieves industry-leading energy efficiency.

HIGH COP

The new YLM series features various advanced technologies including the world-first*1 flat-tube heat exchangers, optimum distribution of refrigerant, high efficiency compressor and DC fan motors.

Comparison of SEER and SCOP (between PUHY-EP-YJM-A and PUHY-EP-YLM-A)



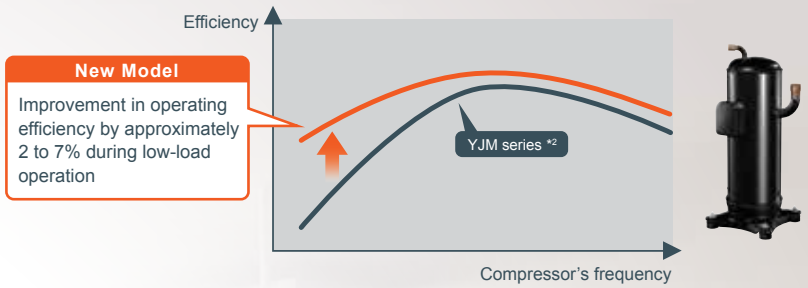
*1: As of October 2013 (according to our own survey); for VRF systems
*2: CITY MULTI series PUHY-EP-Y(S)JM-A
*3: Any continuous operation over 46°C may require an increased frequency of maintenance.
*4: Except for EP300 and EP350 models

New Technology

Equipped with High Efficiency Compressor

Optimizing the capacity of the scroll compressor and modifying the winding of the compressor motor have led to the improvement in operating efficiency by approximately 2 to 7% during low-load operation that can occur often in actual use.

■ Relationship between Compressor's Frequency and Efficiency

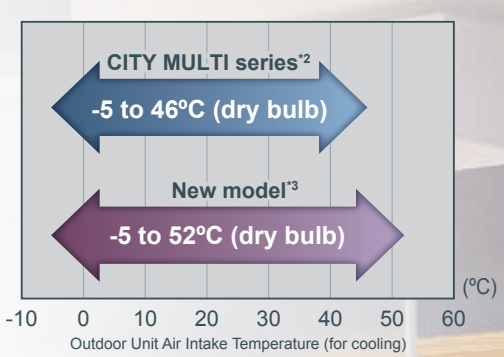


Flexibility of Design (PUHY-P-Y(S)KB-A(-BS)/PUHY-EP-Y(S)LM-A(-BS))

The new model can work in cooling mode effectively at high ambient temperature.

Enhancement in performance of the actual installation environment of the outdoor unit - expands the cooling operation temperature range up to the ambient temperature of 52ºC

Summer temperatures caused by global warming should be a matter of concern when designing air conditioners. Besides, the outdoor unit may undergo higher intake temperature than the ambient temperature due to the higher temperature exhaust air from it. Higher intake air temperature to the outdoor unit may reduce the cooling capacity of the air conditioner.

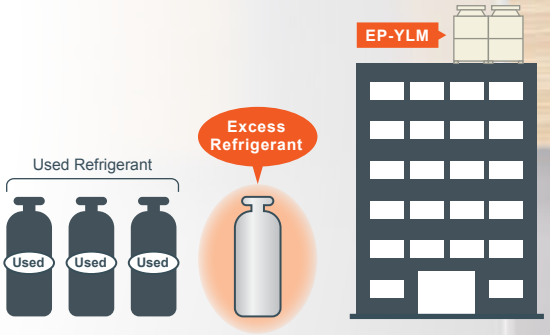


Reliability (PUHY/PURY-EP-Y(S)LM-A(-BS) only)

Less refrigerant required to be charged on site.

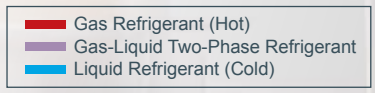
With our new flat-tube heat exchanger the amount of refrigerant to be charged on site can be controlled and reduced. For example, when the total refrigerant piping length is 150m, the amount of refrigerant to be charged on site can be reduced by approximately 10% compared to our conventional models, achieving reduction in cost and time of the construction work.

*In the case of liquid pipe ø19.05

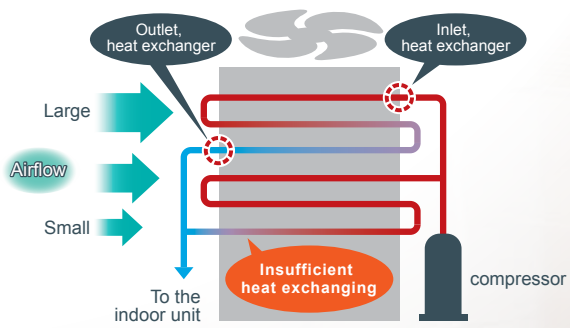


New Technology (PUHY-EP-Y(S)LM-A(-BS) only)*4

Optimum Distribution of Refrigerant Using a BSC Circuit

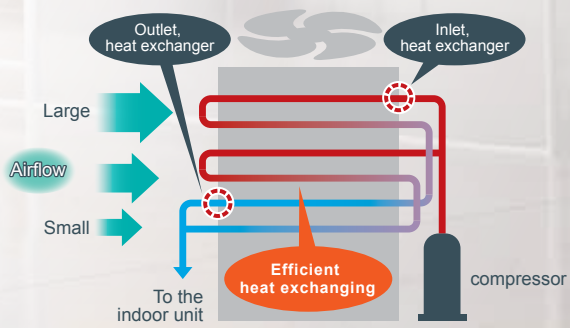


<YJM Series>



The uniform distribution of the gas-liquid two-phase refrigerant flow throughout the heat exchanger resulted in insufficient heat exchanging at the lower part of the heat exchanger where the airflow was smaller.

<New Model>



At the upper part of the heat exchanger where the airflow is larger, the gas-liquid two-phase refrigerant which is having a large cooling capacity is intensively distributed. This function leads to efficient use of the unit's heat exchanging capacity.

Sophisticated Yet Simple Technology

Reliable

Designed and manufactured to the highest standards, the CITY MULTI range offers one of the most reliable air conditioning systems available. Simple to install and easy to maintain, this range provides ideal solutions you can trust to protect your investment.

PEFY-VMS1

PEFY-VMA

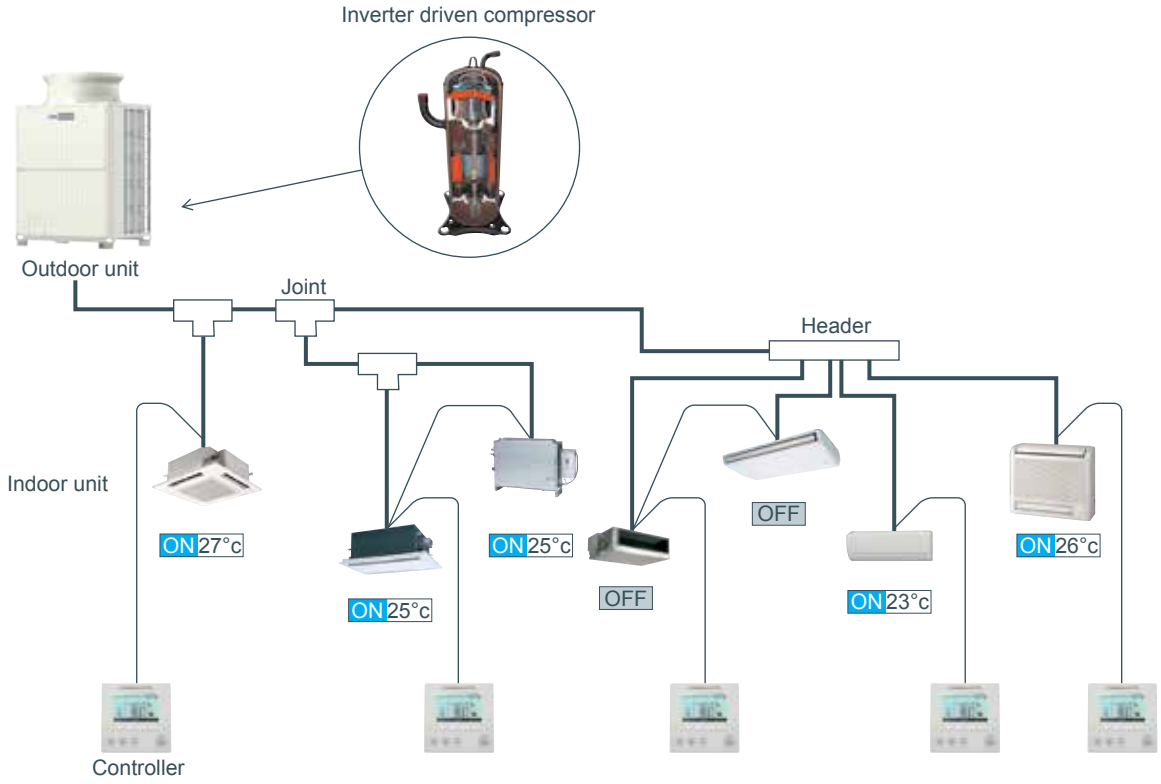
PFFY-VKM

VRF Systems

Our Answer to VRF

Mitsubishi Electric sets the boundaries of VRF technology with the CITY MULTI range, which is available using R410A refrigerant with zero ODP (Ozone Depletion Potential). The range has been specifically designed for today's building requirements and addresses key market issues such as energy efficiency, adaptability and reliability. With user friendly control systems utilizing internet technology and integrated cooling and ventilation indoor units, CITY MULTI is the benchmark and market leader in VRF technology.

VRF is a multi and direct expansion type air conditioning system whereby one outdoor unit can be connected with multiple indoor units. The amount of refrigerant can be regulated freely according to the load on the indoor unit by the inverter driven compressor in the outdoor unit. Zoning in a small office is possible with a small capacity indoor unit. Energy conservation is easily handled because individual indoor units can stop and start their operation as needed. There are various indoor units available in order to suit various interior design needs.

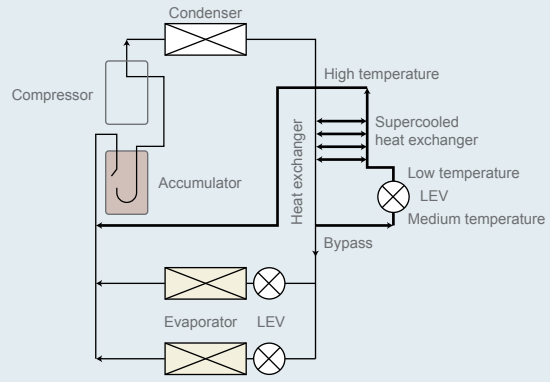


Unbeatable Efficiency

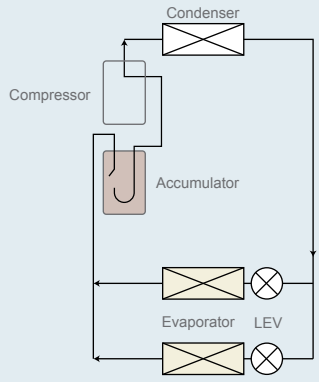
Heat Interchange Circuit

The unique Heat Interchange Circuit (HIC) enhances efficiency by providing additional sub-cooling and allows the expansion device to effectively control the refrigerant distribution, thereby increasing the operating efficiency and reducing the volume of refrigerant in each system.

CITY MULTI Refrigerant Circuit



Common Refrigerant Circuit



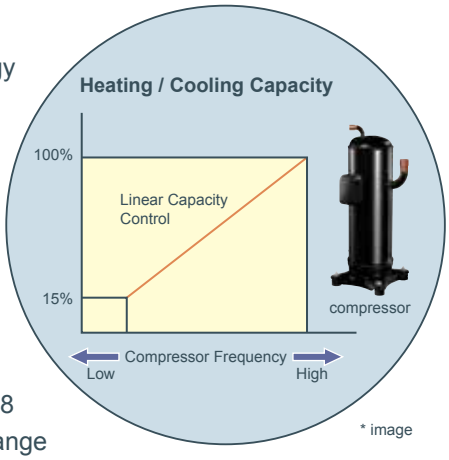
Inverter Driven Compressor Technology

Low Starting Currents

Using inverter driven technology saves energy in several ways:

The compressor varies its speed to match the indoor cooling or heating demand and therefore only consumes the energy that is required.

When an inverter driven system is operating at partial load, the energy efficiency of the system is significantly higher than that of a standard fixed speed, non inverter system.
The fixed speed system can only operate at 100%, however, partial load conditions prevail for the majority of the time. Therefore, fixed speed systems cannot match the annual efficiencies of inverter driven systems.



* image

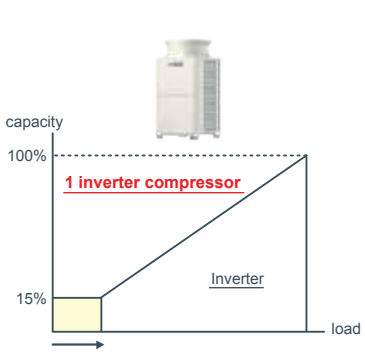
* The values vary depending on the actual conditions such as ambient temperature.

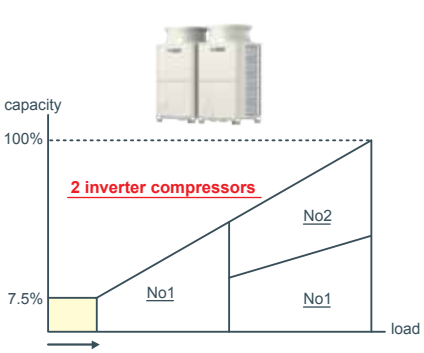
Using proven single inverter driven compressor technology, the CITY MULTI range is favoured by the industry for low starting currents (only 8 amps for a 18HP YLM-A outdoor unit) and smooth transition across the range of compressor frequencies.

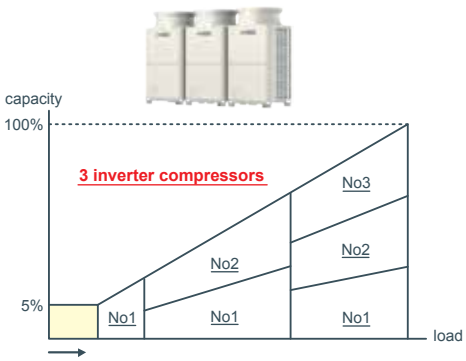
All CITY MULTI compressors are inverter-driven type.
-Capable of precisely matching a building's cooling and heating demands (High COP model).

The outdoor unit combinations comprise 1 unit for 8-18HP systems (for Y and R2 series), 2 units for 20-24HP systems (for R2, 20-36HP) and 3 units for 26-54HP systems (Y series only). Each unit carries one inverter compressor making simple and highly reliable control possible.
Not only does it allow low starting currents, the inverter-driven compressor also provides precise indoor comfort and adapts to the air conditioning load.

Stable and Smooth Operation

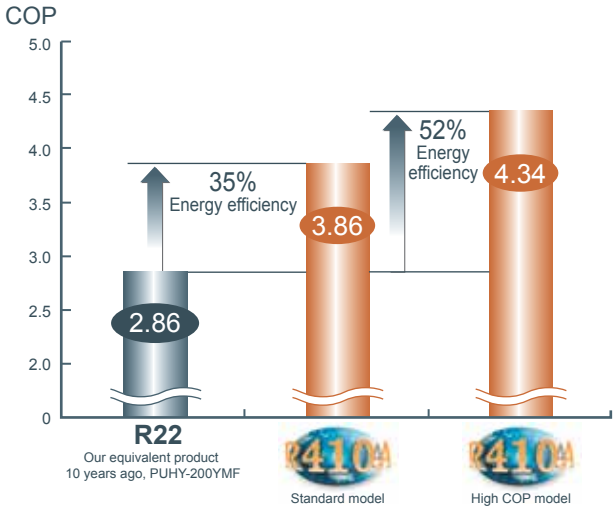






Total Energy Conservation

Comparison of COP (energy efficiency) – 8HP system



* Average COP of cooling / heating
* The values were obtained under the standard conditions.

High COP (Coefficient of Performance) is realized

Intelligent Power Module (IPM) Technology

The YLM-A range from Mitsubishi Electric provides precise control of energy input through utilisation of its Intelligent Power Module (IPM) technology. By employing this technology it is possible to closely match the building requirements, achieving more accurate control of the occupied space. By using incremental 1Hz steps of capacity control, the amount of power input required is significantly reduced, resulting in greatly improved COP's.

In addition, IPM technology ensures effective performance under partial load conditions, a condition that most systems will be in for the majority of the normal working life cycle. By taking into account the efficiency at both part load and peak load conditions, R410A CITY MULTI is designed to provide unbeatable year round/seasonal efficiency.

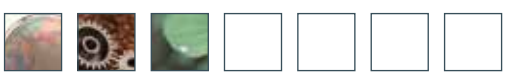
The Difference between YLM-A and Previous Mitsubishi Electric Models

Technology is the key when increased efficiency is demanded. The CITY MULTI YLM-A range is able to deliver this in simple ways.

A highly efficient R410A scroll compressor design results in less friction losses at the motor. A simplified refrigerant circuit (low pressure loss) including a new accumulator design also adds a few more points to the efficiency scale. Enhancements to the heat interchange circuit, an inverter driven fan motor and a heat exchanger design again add vital increases to overall system efficiencies and COPs.

The Importance of COP

COP stands for "Coefficient of Performance". It is a measure of the useful energy a system can deliver compared to the energy it consumes. It is calculated by dividing the energy output by the energy input of a system. The higher the figure then the more efficient the system is deemed to be. Mitsubishi Electric VRF models, the world's highest energy-efficient air-conditioners, will undoubtedly reduce millions of tons of CO_2 emissions.



For the Environment

Enhancing Environmental Care
(measures for the RoHS Directive and the refrigerant reduction)

Every unit is in compliance with the RoHS Directive,* which stands for the Restriction of Hazardous Substances: Lead-free soldering is used to avoid Lead Groundwater Contamination on the print board. The amount of refrigerant on the unit has also been reduced to enhance environmental care.

* RoHS Directive: the restriction of the use of certain hazardous substances in electrical and electronic equipment that has been sold in EU since July 2006

Efficient R410A Refrigerant

History of Refrigerant

R22, an HCFC-based refrigerant, had been a popular choice for most chillers. However, R22 has been targeted by the Montreal Protocol to be phased out in new equipment. Additionally, governments in many countries are enforcing a ban of HCFC-based refrigerants for new installations.

Because of these restrictions, R410A refrigerants are desirable. R410A is a blend of HFCs, which do not deplete the ozone.

Technical Aspects of Refrigerant

R410A is a more efficient refrigerant as it has a higher specific heat capacity when compared to R407C or R22. This higher energy carrying capacity allows for smaller pipe sizes, longer pipe runs and reduces the volume of refrigerant within a system. This is a major factor when considering safety and environmental requirements in the design, manufacture, installation, operation, maintenance and disposal of refrigerating systems.

New Design

Photo : Y-YLM series

New Unit Casing

Reduction in fan input power

New Heat Exchanger Design

Improvement of COP

New Inverter Compressor

Improvement of COP

New Control Box Design

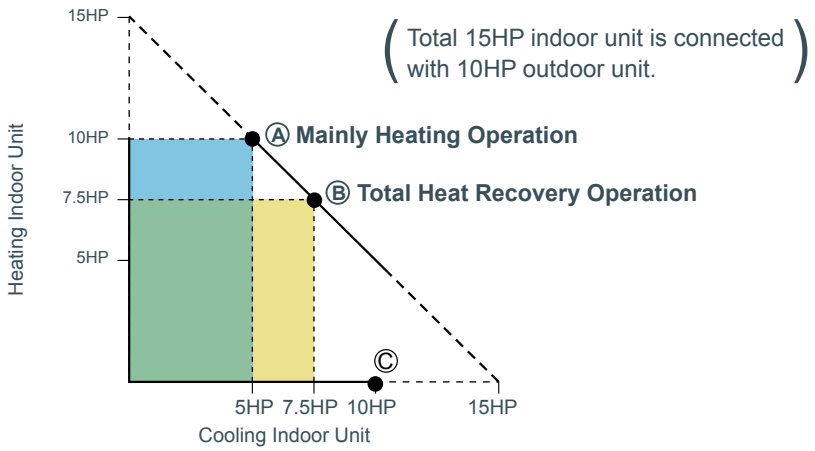
Improvement of reliability and easy maintenance

Affordable & Effective

air conditioning you can rely on

Energy efficiency is maximised when the R2 Series is simultaneously heating and cooling

Operation Pattern of CITY MULTI R2 System

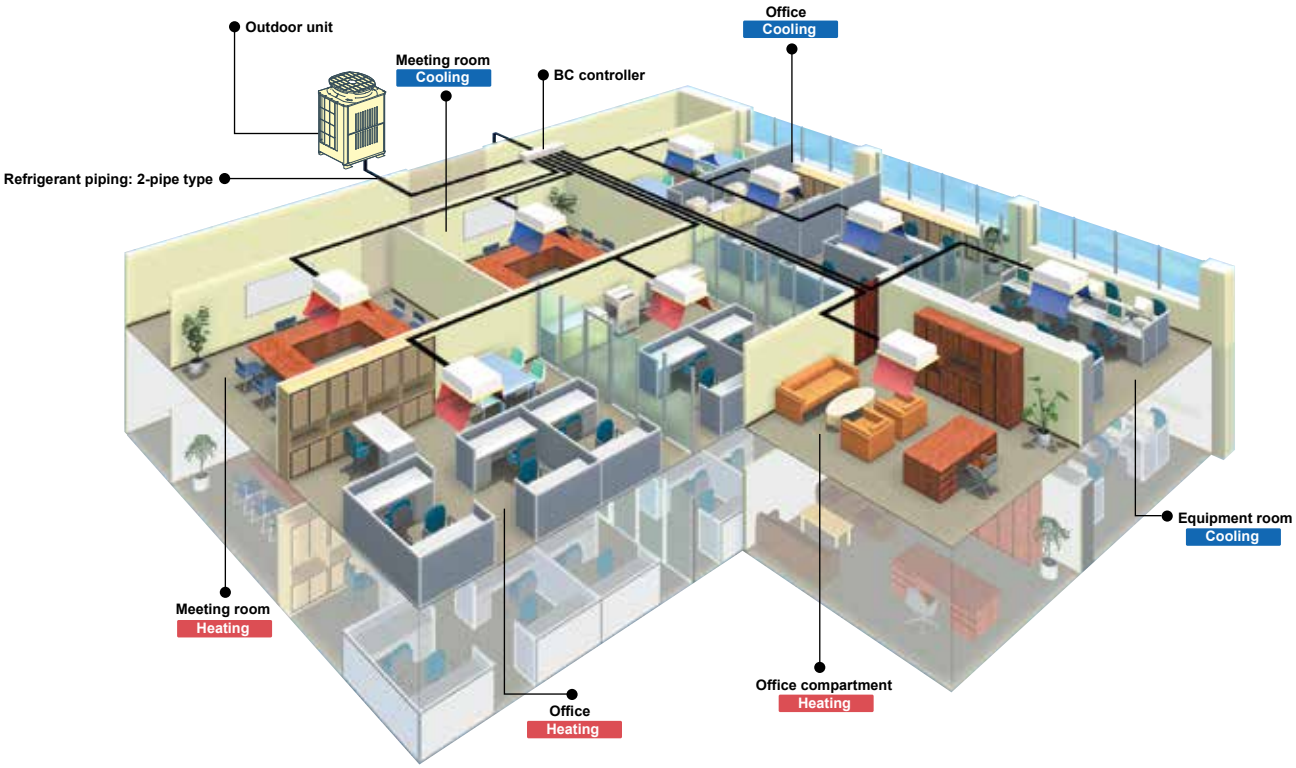


Unique Technology

Unique to Mitsubishi Electric, our heat recovery technology uses just two pipes, as opposed to the market conventional three. Our R2 system, designed for effective simultaneous heating and cooling, offers substantial savings on installation and annual running costs.

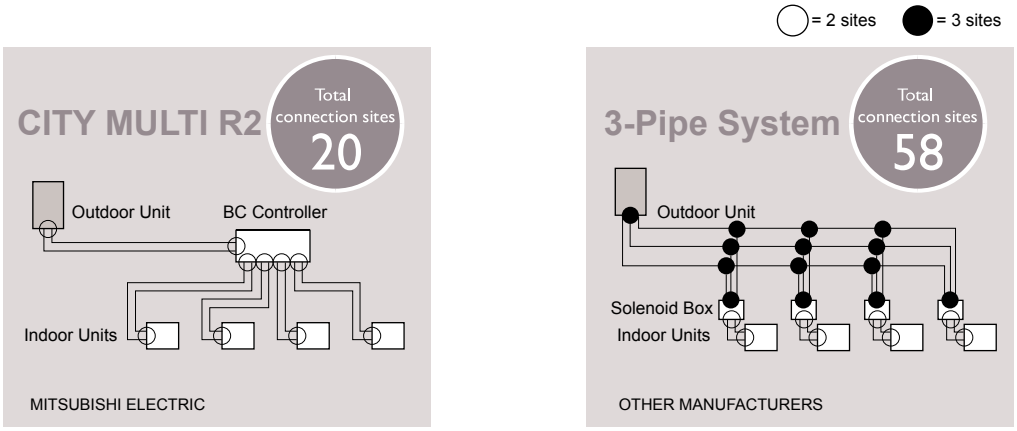
Why Heat Recovery?

Flexibility and efficiency are key factors when selecting a heat recovery system. For example, while a heat pump system is adequate for a large open-plan office, an office that has a more partitioned structure will need to simultaneously heat or cool different sections of the office according to each user's individual preferences. The efficiency of this type of system comes from the ability to use the by-products of cooling and heating to transfer energy where it is required, thus acting as a balanced heat exchanger achieving up to 20% cost savings over a conventional heat pump system. The number of connection sites needed for an R2 system are also significantly lower than those needed for a three pipe version. This helps to reduce installation costs, further increasing the savings associated with CITY MULTI.



“2-pipe” System Provides Better Efficiency and Performance

Comparison Example of Piping Connection Sites

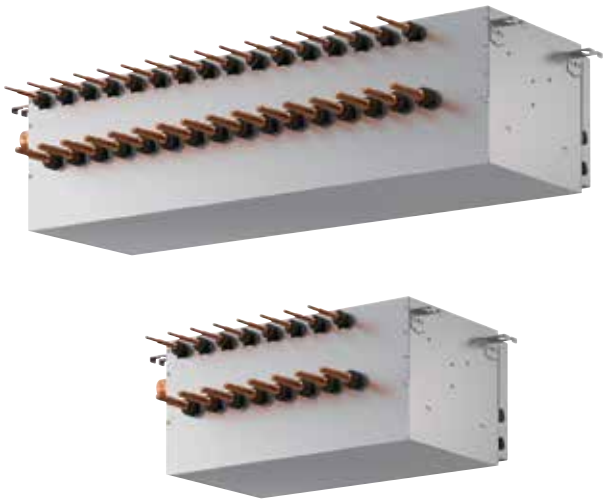


The World's First and Only "2-Pipe" System

How does the R2 Heat Recovery System Operate on 2-Pipe's?

The secret of CITY MULTI heat recovery systems lies in the BC Controller

The BC Controller houses a liquid/gas separator, allowing the outdoor unit to deliver a mixture (2-phase) of hot gas for heating and liquid for cooling, all through the same pipe. Three pipe systems allocate a pipe to each of these phases. When this mixture arrives at the BC Controller, it is separated and the correct phase delivered to each indoor unit depending on the individual requirement of either heating or cooling.

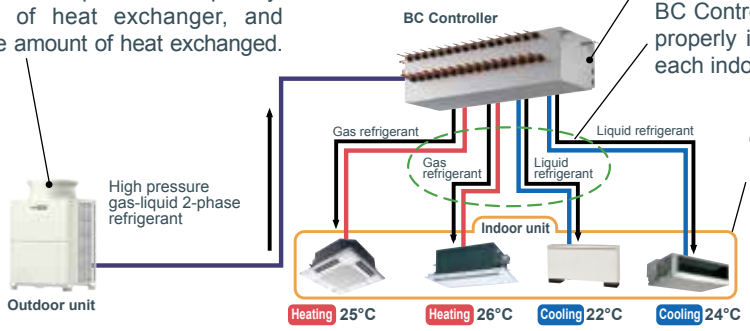


1
High pressure and low pressure decides the compressor frequency, the mode of heat exchanger, and controls the amount of heat exchanged.

2 R2 Refrigerant Circuit
Gas-liquid 2-phase refrigerant from outdoor unit into gas and liquid refrigerant is divided by gas-liquid separator in BC Controller.

BC Controller divides refrigerant to each indoor unit properly in compliance with the operation mode of each indoor unit.

3
Refrigerant flow is adjusted by temperature difference between inlet and outlet.

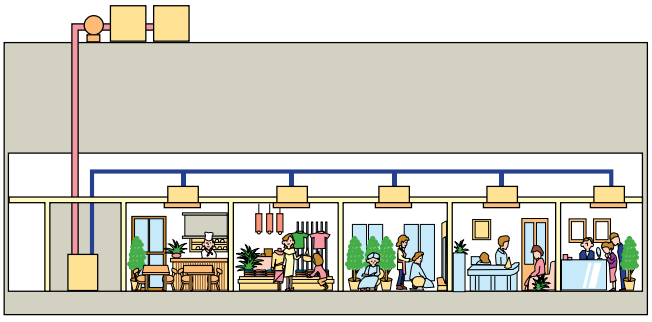


Meet the demand of
- - - cooling / heating flexibly.

Heating=gas refrigerant
Cooling=liquid refrigerant

Water Cooled CITY MULTI Benefits

Water cooled systems are ideally suited for use in temperate and cooler climates since heat exchange with the outside air is not required.



Water cooled systems can be used even in buildings that are taller than 50m by running a main water pipe through each floor.

Any heat source system that can supply heat source water between 10°C~45°C can be used.

Simultaneous heating and cooling operation is available. (WR2 series)

It is suggested that Water-Cooled systems are used in buildings in which there are heating and cooling needs as follows.

■ **Buildings that require all year cooling**
Example:
- Tenant buildings in which kitchens and offices exist together
- Buildings in which equipment rooms and offices exist together

■ **Buildings in which there are large room temperature differences between sunny and unsunny rooms**
■ **Hotels in which there are a lot of individual operational needs**

Energy Saving Technology

What is Water-Cooled?

>A unique offering from Mitsubishi Electric

It is possible now to combine the features of VRF with a water circuit using CITY MULTI WR2/WY. In this case the heat is rejected to a water source rather than to the outside air.

The advantages of water cooled systems are that the water can be delivered at optimised temperatures and volumes, which allows even greater flexibility and increased COP.

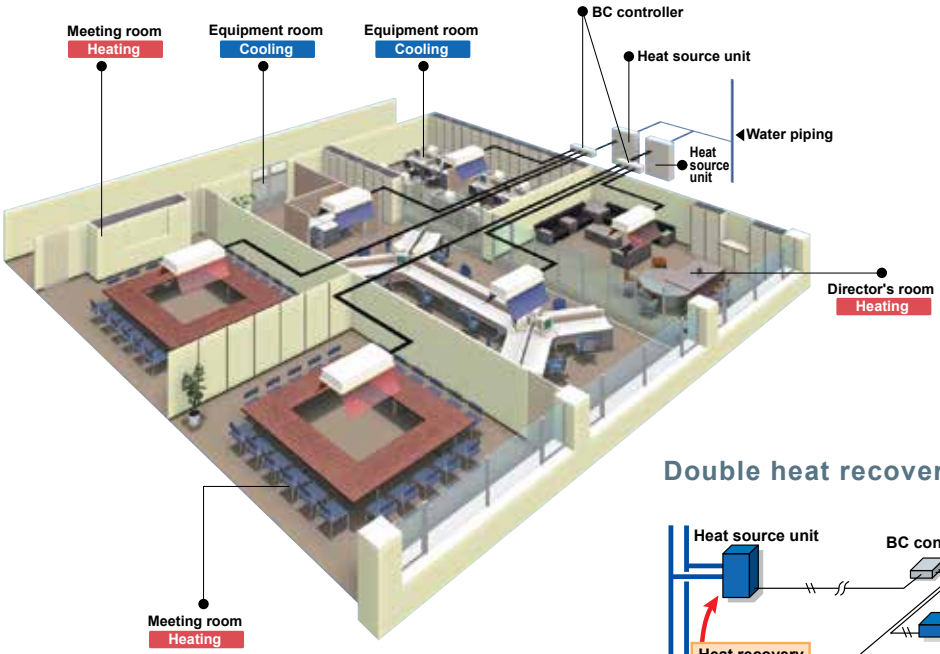
WR2(Heat recovery type)

Mitsubishi Electric now offers double heat recovery operation.

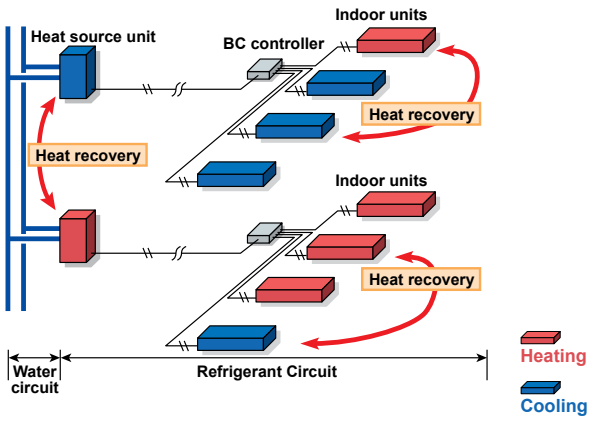
The first heat recovery is within the refrigerant system. Simultaneous cooling and heating operation is available with heat recovery performed between indoor units.

The second heat recovery is within the water loop, where heat recovery is performed between the PQRY units.

This double heat recovery operation substantially improves energy efficiency and makes the system the ideal solution to the requirements of modern office buldings, where some areas require cooling even in winter.



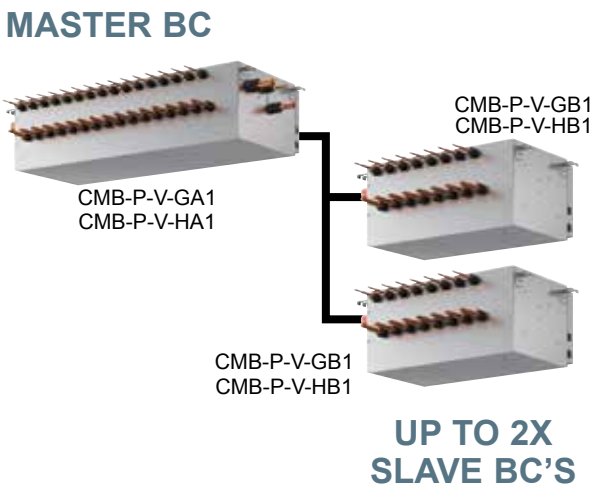
Double heat recovery (WR2)



Fit Out Flexibility

Mitsubishi Electric offers the most flexible piping architecture when it comes to tenant fit out flexibility. Using our multiport BC box and refrigerant ball valves on BC box outlets, it is very easy to move/add/modify indoor units. Units can be added or removed without the need for recovering the total refrigerant charge resulting in the rest of the system remaining in operation.

The City Multi BC controller allows us to have spare ports to add additional indoor units at a later date. In most situations, a slave BC controller can also be retrofitted to give additional connections.



Mitsubishi Electric branch controller fitted with refrigeration ball valves for ease of maintenance and fit out flexibility.

It is very hard to achieve this with a 3 pipe system as the pipework is sized on the current connected load.

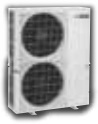
All City Multi VRF indoors and BC's are back engineered to ensure the latest products can be installed on VRF systems running on older refrigerants.

Mitsubishi Electric have recently introduced "Replace Technology" which allows us to replace the outdoor but still utilise the existing pipework, indoors, and BC controllers.

Outdoor Unit

- Heat Pump Series (S)
- Heat Pump Series (Y)
- Heat Pump Series - High COP (Y)
- Heat Pump Series - Zubadan
- Water Cooled Heat Pump Series (WY)
- Heat Recovery Series (R2)
- Heat Recovery Series - High COP (R2)
- Water Cooled Heat Recovery Series (WR2)

Wide Selection of Outdoor Units

System	Type	Model name		HP	4.5	5	6	8	10	12	14	16
				Model	P112	P125	P140	P200	P250	P300	P350	P400
Air Cooled	Heat Pump	S series NEW Page36 - Page37 PUMY-P VKM-A(-BS) PUMY-P YKM-A(-BS) 			4.5	5	6					
		Y series NEW Page38 - Page48 PUHY-P YKB-A(-BS) PUHY-P YSKB-A(-BS)	*1	S				8	10			8 8
				L						12	14	
				XL								
		Y series - High COP NEW Page49 - Page59 PUHY-EP YLM-A(-BS) PUHY-EP YSLM-A(-BS)		S				8	10			
				L						12	14	
				XL								16
		ZUBADAN series Page66 PUHY-HP YHM-A(-BS) PUHY-EP YSHM-A(-BS)		S				8	10			8 8
	Heat Recovery	R2 series NEW Page67 - Page72 PURY-P YLM-A(-BS) PURY-P YSLM-A(-BS)		S				8	10			8 8
				L						12	14	
				XL								
		R2 series - High COP NEW Page73 - Page77 PURY-EP YLM-A(-BS) PURY-EP YSLM-A(-BS)		S				8	10			
				L						12	14	
				XL								16
Water Cooled	Heat Pump	WY series Page60 - Page65 PQHY-P YHM-A PQHY-P YSHM-A						8	10	12		8 8
	Heat Recovery	WR2 series Page78 - Page80 PQRY-P YHM-A PQRY-P YSHM-A						8	10	12		8 8

*1. Indicates S, L, XL modules

*2. The circled numbers in the table indicate the horse power, and the combination of S, L, and XL modules.

18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54
P450	P500	P550	P600	P650	P700	P750	P800	P850	P900	P950	P1000	P1050	P1100	P1150	P1200	P1250	P1300	P1350
8 10	10 10	10	10							10								
		12	14	12 14	14 14	14 16	14	16		12 16	12 12 14	12 14 16	14 14 16	14 14	14 16	14	16	
							18	18	18 18					18	18	18 18	18 18	18 18 18
	10 10	10		8 8 10	8 8	8 10	8	10										
		12	12 12		12	12	12 12	12 12	12 12 12	12 12 14	12 12	12 14	14 14	14 14	14	14		
18											16	16	16	18	16 18	18 18	16 18 18	18 18 18
	10 10																	
8 10	10 10	10																
		12	12 12	12 14	14 14	14 16	16 16	16										
								18	18 18									
	10 10	10																
		12	12 12	12 14	14 14	14												
18						16	16 16	16 18	18 18									
8 10	10 10	10 12	12 12	8 8 10	8 10 10	10 10 10	10 10 12	10 12 12	12 12 12									
8 10	10 10	10 12	12 12															

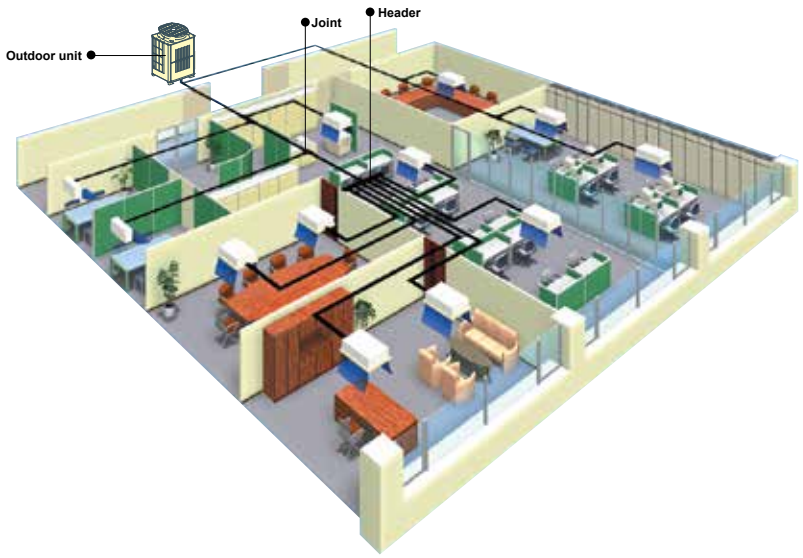
Cooling or Heating

Y series
- PUHY-P YKB-A(-BS)
- PUHY-P YSKB-A(-BS)
- PUHY-EP YLM-A(-BS)
- PUHY-EP YSLM-A(-BS)

The two-pipe zoned system designed for Heat Pump Operation

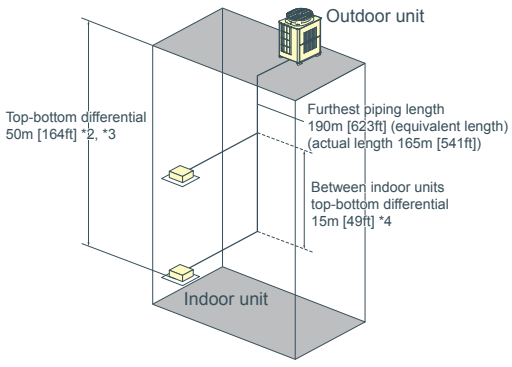
The CITY MULTI Y series (for large applications) make use of a two-pipe refrigerant system, which allows for system changeover from cooling to heating, ensuring that a constant indoor climate is maintained in all zones. The compact outdoor unit utilises R410A refrigerant and an inverter-driven compressor to use energy effectively.
With a wide line-up of indoor units in connection with a flexible piping system, the CITY MULTI series can be configured for all applications. Up to 50 (Y series) indoor units can be connected with up to 130% connected capacity to maximise engineer's design options. This feature allows easy air conditioning in each area with convenient individual controllers.

Large Offices (Y series)



[8-54HP (Y series)]
[8-54HP (High COP Y series)]

Refrigerant Piping Lengths	Maximum meters [Feet]
Total length	1,000 [3,280]
Maximum allowable length	165 (190equivalent) [541(623)]
Farthest indoor from first branch	40 [131]*1
Vertical differentials between units	**Maximum meters [Feet]**
Indoor/outdoor (outdoor higher)	50 [164]*2
Indoor/outdoor (outdoor lower)	40 [131]*3
Indoor/indoor	15 [49]*4



*1 90m [295ft] is available. When the piping length exceeds 40m [131ft], use one size larger liquid pipe starting with the section of piping where 40m [131ft] is exceeded and all piping after that point.
*2 90m [295ft] is available depending on the model and installation conditions. For more detailed information, contact your local distributor.
*3 60m [196ft] is available depending on the model and installation conditions. For more detailed information, contact your local distributor.
*4 30m [98ft] is available. If the height difference between indoor units exceeds 15m [49ft] (but does not exceed 30m [98ft]), use one-size larger pipes for indoor unit liquid pipes.

Outdoor Unit

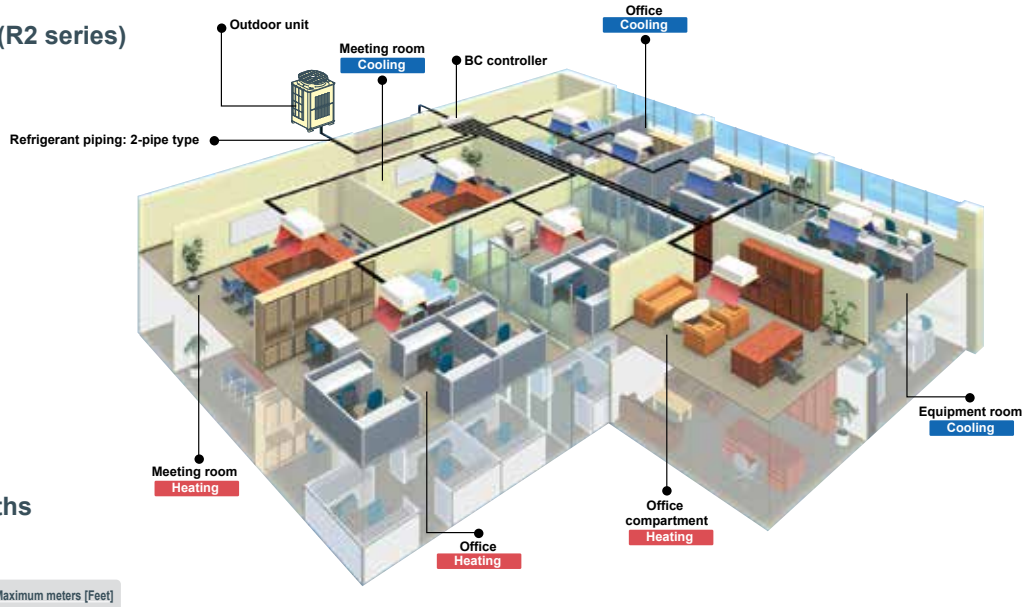
Simultaneous Cooling and Heating

R2 series
- PURY-P YLM-A(-BS)
- PURY-P YSLM-A(-BS)
- PURY-EP YLM-A(-BS)
- PURY-EP YSLM-A(-BS)

The world's first two-pipe system that Simultaneously Cools and Heats

CITY MULTI R2 series offers the ultimate in freedom and flexibility. Cool one zone while heating another. Our exclusive BC controller makes two-pipe simultaneous cooling and heating possible. The BC controller is the technological heart of the CITY MULTI R2 series. It houses a liquid and gas separator, allowing the outdoor unit to deliver a mixture of hot gas for heating and liquid for cooling, all through the same pipe.
This innovation results in virtually no energy wasted by being expelled outdoors. Depending on capacity, up to 50 indoor units can be connected with up to 150% connected capacity.

Installation image (R2 series)

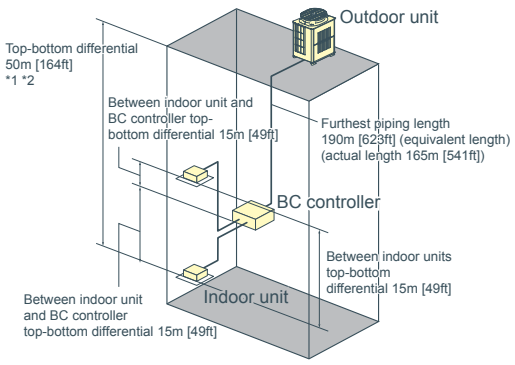


System Pipe Lengths

[8-36HP (R2 series)]
[8-36HP (High COP R2 series)]

Refrigerant Piping Lengths	Maximum meters [Feet]
Total length (E)P600, 650 only	550 [1,804]
Total length (E)P700, 750, 800, 850, 900 only	700 [2,296]
Maximum allowable length	165 (190equivalent) [541(623)]
Maximum length between outdoor and single/main BC controller	110 [360]
*Maximum total length is dependent upon the distance between the outdoor unit and the single/main BC Controller.	
Maximum length between single/main BC controller and indoor	40-60 [131-196]

Vertical differentials between units	Maximum meters [Feet]
Indoor/outdoor (outdoor higher)	50 [164]*2
Indoor/outdoor (outdoor lower)	40 [131]*2
Indoor/BC controller (single/main)	15 [49]
*Maximum length between single/main BC controller and indoor is dependent upon the vertical differential between the single/main BC controller and the indoor unit.	
Indoor/indoor	15 [49]
Main BC Controller/Sub BC Controller	15 [49]



*1 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m [131ft].
*2 Depending on the model and installation conditions, top-bottom differential 90m [295ft] (o/u above) and 60m [196ft] (o/u below) is available. For more detailed information, please contact your nearest sales office or distributor.

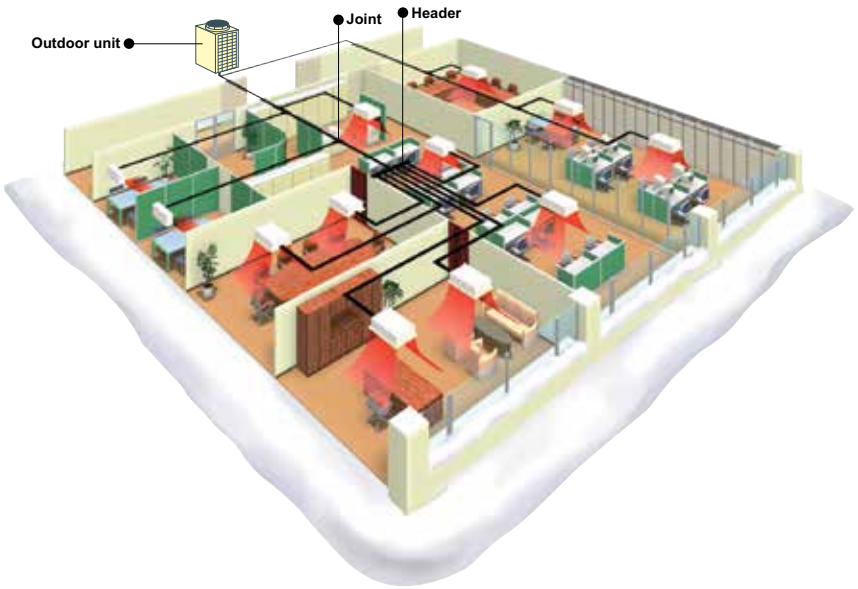
Cooling or Heating

ZUBADAN series
- PUHY-HP YHM-A(-BS)
- PUHY-HP YSHM-A(-BS)

Bringing year round comfort solutions to extreme climates

CITY MULTI ZUBADAN series combines the ultimate in application flexibility and powerful cooling and heating capabilities to deliver precise comfort even in the coldest days of the year down to -25°C.
The technology behind this is a Flash Injection Circuit which provides the optimum amount of refrigerant to the system via a compressor through a specially designed injection port to ensure a particularly stable operation. With this, ZUBADAN can provide full heating performance even at -15°C and continuous heating for up to 250 minutes in one continuous cycle, ensuring phenomenal heating performance at low temperatures.

Installation image

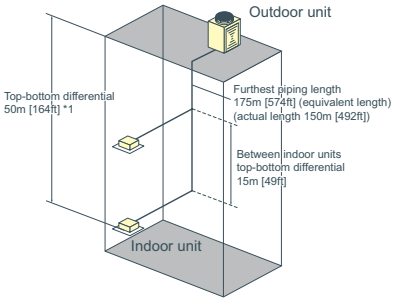


System Pipe Lengths

[8-10HP]

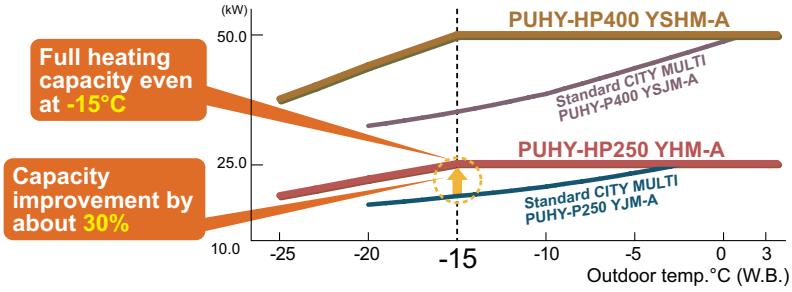
Refrigerant Piping Lengths	Maximum meters [Feet]
Total length	300 [984]
Maximum allowable length	150 (175equivalent) [492 (574)]
Farthest indoor from first branch	40 [131]

Vertical differentials between units	Maximum meters [Feet]
Indoor/outdoor (outdoor higher)	50 [164]
Indoor/outdoor (outdoor lower)	40 [131]
Indoor/indoor	15 [49]



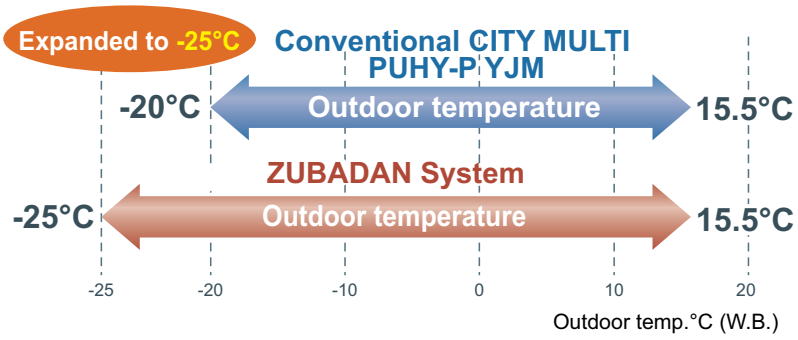
*1 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m [131 ft].

Stable Heating Performance even at -15°C

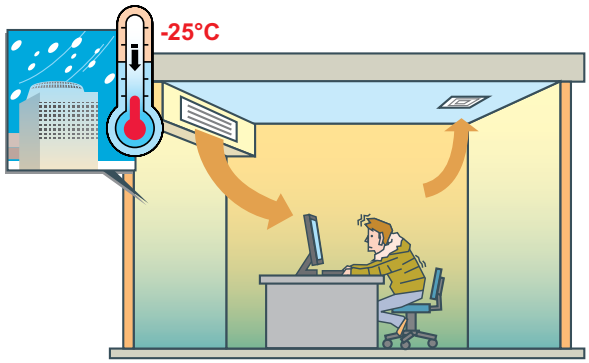


Using an industry first 'Flash-injection Circuit', the ZUBADAN System is able to provide FULL heating performance in ambient temperatures as low as -15°C.

Expanded Heating Operation down to -25°C

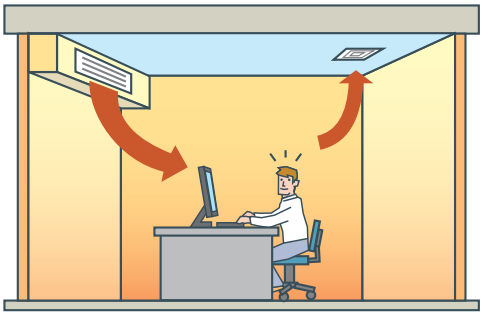


From a previous LOWEST operating ambient temperature of -20°C, the ZUBADAN System pushes the boundaries of technology to give heating in ambient temperatures as low as -25°C.



Previously, heating performance dropped off when the temperature fell below -20°C!

With ZUBADAN System



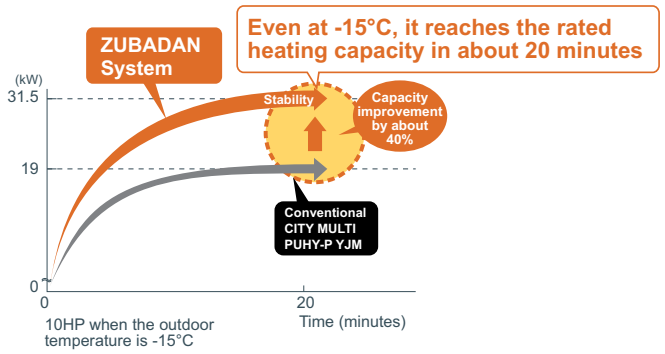
The new ZUBADAN System has no trouble keeping the occupants nice and warm at such temperatures.

High Static Pressure Setting

With our new ZUBADAN model, high static pressure setting up to 60Pa is available by setting the dip switch (0Pa at factory setting) making it ideal and flexible for any type of application.

Shorter Warm-up in about 20 Min.

With its new improved startup performance, the ZUBADAN system achieves full heating capacity even when outdoor temperatures are as low as -15°C. Heating capacity, about 20 minutes after startup is improved by 40% compared to the conventional model; ensuring occupants have an immediate comfortable air solution.



Heating capacity

Reliable and Long Product Life Cycle

Backup Function
(HP400 and HP500 models)

The ZUBADAN system ensures an exceptionally high level of reliability by utilizing a new backup function, which can be easily operated in the case of a malfunction from an indoor unit remote controller.

Rotation Function
(HP400 and HP500 models)

Running outdoor units alternately using its newly developed ‘Rotation Function’, the system is able to ensure an optimum product life cycle for both of its component units.

Maximum Stable Operation

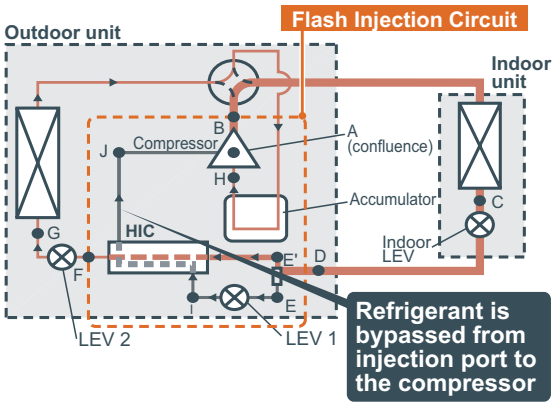
By utilizing our advanced Flash Injection Circuit, the system can not only provide continuous heating for up to 250 minutes in one continuous cycle, but also significantly lessens defrost time to give exceptionally stable heating operation.

Heating up to 250 min. straight

Reduced Defrosting time

Startup Comfort

One of the key factors of the units' newly designed Flash Injection Circuit is that the optimal amount of refrigerant can be provided to the system via the compressor through a specially designed injection port to ensure particularly stable operation. In simple terms, the system allows a quick startup time and continuous heating; even in low ambient conditions.

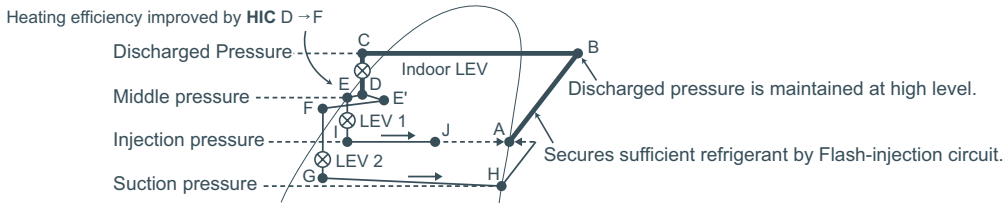


Note: **Heat Interchange Circuit (HIC)**
Heating efficiency is improved by enhancing the recollection of heat at the outdoor unit with the low temperature refrigerant from the HIC.

Constant Comfort

With its new highly effective defrost feature (which prevents automatic defrosting when it is not required), the ZUBADAN System can deliver conditioned heating operation for up to 250 minutes in one continuous cycle!

Heating capacity is maintained by the Flash-injection circuit.

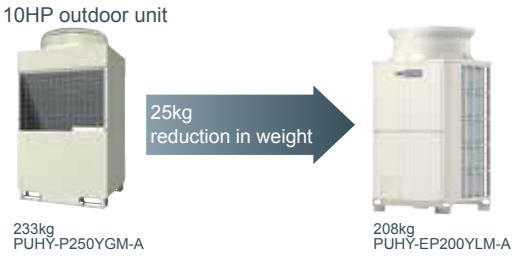


[Pressure Enthalpy diagram showing HIC]

Features in Y (Heat Pump) series & R2 (Heat Recovery) series

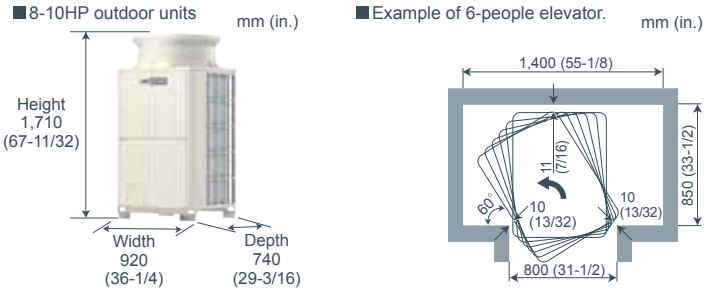
Compact Design Industry Leading Weight Saving

The manageability of the outdoor unit has been improved due to a drastic reduction in its weight, leading to easy transportation and installation.



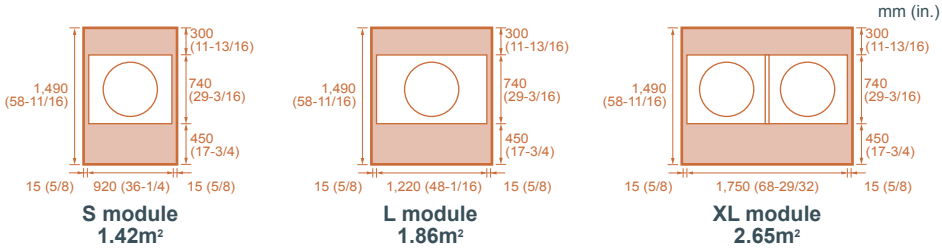
Industry Leading Space Saving

The downsized outdoor unit can be transported through a 800 mm wide door.

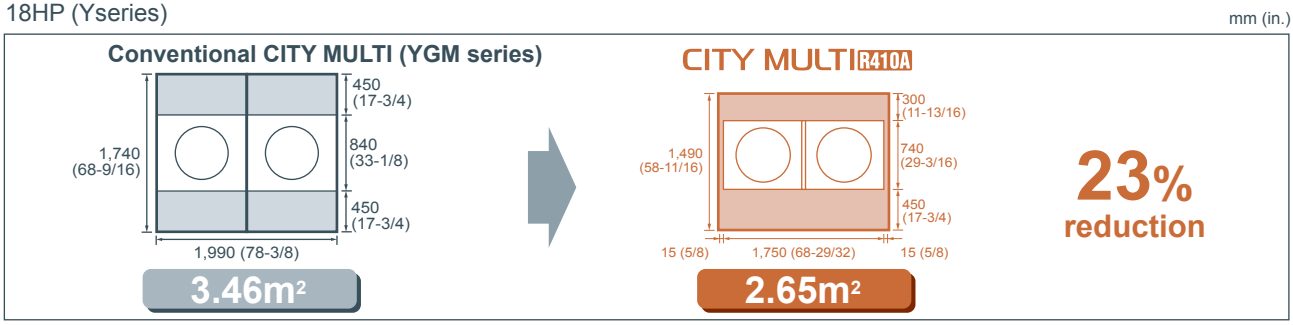


Effective Use of Space

The new models have a smaller foot print and service space requirement than previous models.



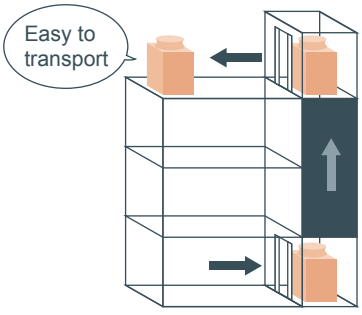
18HP (Yseries)



The unit can easily be transported even into slender buildings.

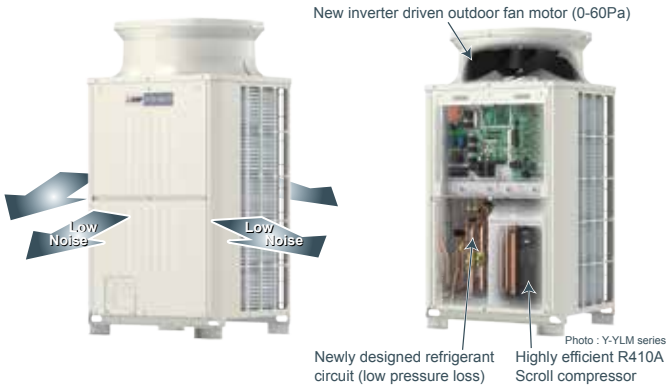
The narrow space between buildings makes it difficult to use a crane.

CITY MULTI makes it easy.



Low Noise Levels, New Fan Design

CITY MULTI VRF systems led the introduction of larger single fan motors some ten years ago, achieving substantially lower noise levels over multiple designs.
Continuing the development in the areas of blade shape and weight, Mitsubishi Electric have managed to achieve even higher performance and lower noise levels. To reduce noise levels further and comply with inner city residential noise regulations, all outdoor units include low noise mode. This function works by lowering the fan speed and compressor frequency proportionally with reduction in demand.

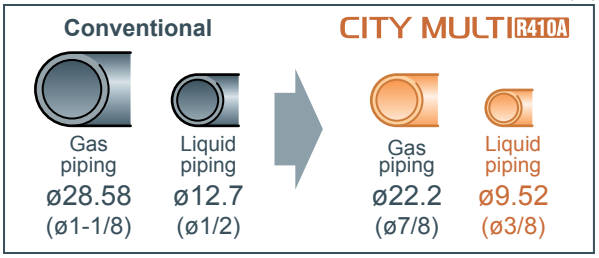


The compressor compartment is sealed by metal panels to attain low noise levels in all directions.

R410A Pipe Sizing

As R410A has a higher specific heat capacity than R22, the pipework is smaller. This means the pipe itself is cheaper, easier to install and less riser space is required within the building.

mm (in.)



Based on 10HP model

Blue Fin Treatment (PUHY-P-YKB/ PURY-P-YLM only)

The anti-corrosion Blue Fin treatment of the heat exchanger is especially effective in urban environments where traffic pollution can damage the aluminum fins reducing the capacity and life expectancy of the unit. All CITY MULTI R410A outdoor units have been treated with Blue Fin.

*Standard:Anti-corrosion Blue Fin treatment & copper tube.
BS type (optional):salt-resistant cross fin & copper tube.

Salt resistant Cross Fin (PUHY/PURY-EP-Y(S)LM-A only)

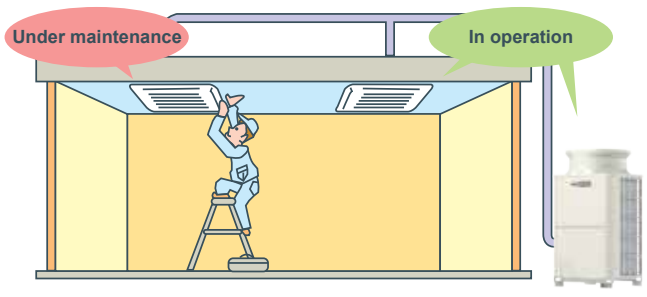
For PUHY/PURY-EP-Y(S)LM-A with aluminum flat-tube heat exchanger, salt resistant cross fin is provided as standard.

Refer to B.S. Specification sheet on p.169

Easy Maintenance

Even when one of the indoor units in the system is under maintenance, the other indoor unit can still operate.

* Not applicable to all situations.
* Be sure to turn off the power to the indoor unit when repairing or servicing the unit.



60Pa High Static Pressure as standard

Both Y and R2 series correspond to high static pressure of 60Pa, ideal and flexible for any type of application.

System Check

Ensuring simple and easy maintenance, system tests are available to check wiring, sensors and the refrigerant amount.

Advanced Energy-saving Technologies

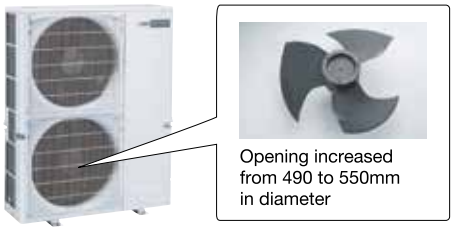
S series | PUMY-P VKM
PUMY-P YKM

Highly efficient fan and grille for outdoor unit

The shapes of the fan and grille of the outdoor unit have been redesigned, resulting in an increase in blowing capacity and more efficient heat exchange while maintaining the same operating noise level.

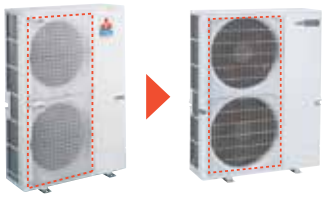
Outdoor unit fan opening increased

The diameter of the opening for the fan in the outdoor unit has been increased from 490 to 550mm. Blowing capacity has been increased while maintaining the same fan rotation speed.



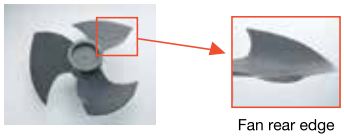
Grille shape changed

The shape of the air outlet grille has been changed to reduce pressure loss. This has helped to improve heat exchange performance.



Inflexed fan

Adoption of a fan with improved ventilation characteristics and a newly designed rear edge that suppresses wind turbulence raises fan operation efficiency.

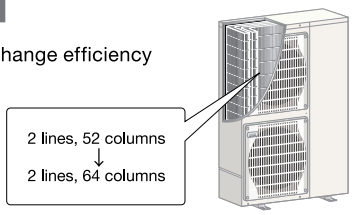


Highly efficient heat exchanger

A high density and increase in surface area have improved the heat-exchange efficiency of the heat exchanger.

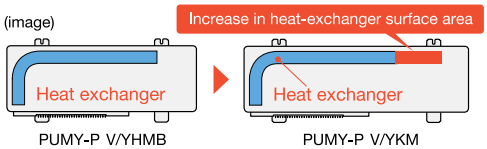
High-density heat exchanger

The pipe diameter has been changed from 9.52 to 7.94mm, resulting in a high-density heat exchanger.



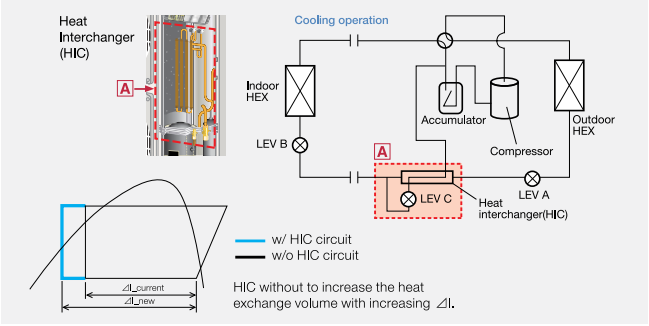
Heat-exchange surface area increased

The heat exchanger size has been extended horizontally, increasing the surface area.



Heat Interchanger (HIC) Added

An HIC circuit has been added to improve energy efficiency during cooling operation. Liquid refrigerant is rerouted, transformed into a gas state and injected back into the system to increase overall pressure of the refrigerant being sent to the compressor, thereby reducing the load on the compressor and raising efficiency.

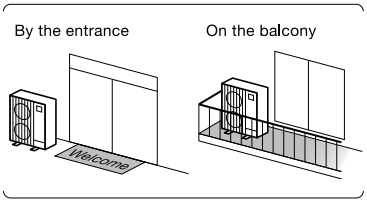


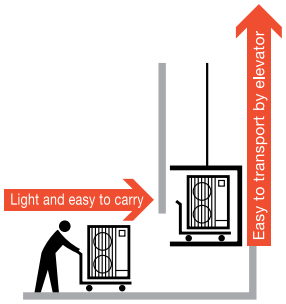
Demand Response Capable

Demand Repsonse mode is activated in response to signals sent from the electric power company at times when it is necessary to reduce peak demand.
(Currently only applicable in Australia).

Light weight

Easy to transport and install at site.

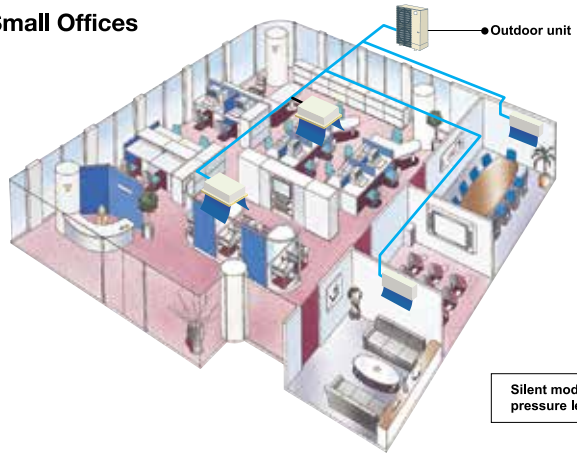




The two-pipe zoned system designed for Heat Pump Operation

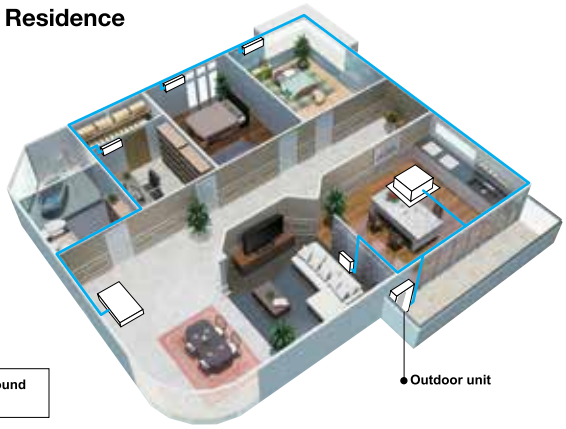
The CITY MULTI S series (for small applications) make use of a two-pipe refrigerant system, which allows for system changeover from cooling to heating, ensuring that a constant indoor climate is maintained in all zones. The compact outdoor unit utilizes R410A refrigerant and an inverter-driven compressor to use energy effectively.
With a wide range of indoor unit line-up in connection with a flexible piping system, the CITY MULTI series can be configured for all applications. Up to 12 (S series) indoor units can be connected with up to 130% connected capacity to maximize engineer's design options. This feature allows easy air conditioning in each area with convenient individual controllers.

Small Offices



Silent mode can reduce sound pressure level by 3dB(A)

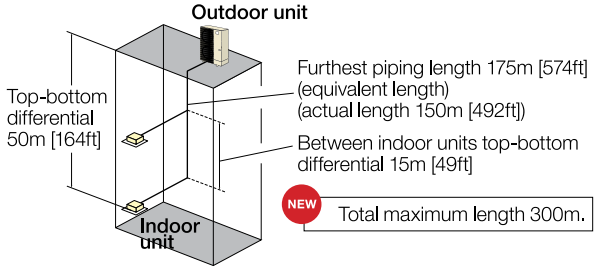
Residence



[P112~140(V/YKM)]

Refrigerant Piping Lengths	Maximum meters [Feet]
Total length	300 [984]
Maximum allowable length	150 (175 equivalent) [492(574)]
Farthest indoor from first branch	30 [98]

Vertical differentials between units	Maximum meters [Feet]
Indoor/outdoor (outdoor higher)	50 [164]
Indoor/outdoor (outdoor lower)	40 [131]
Indoor/indoor	15 [49]



Cooling or Heating

WY series — PQHY-P YHM-A
PQHY-P YSHM-A

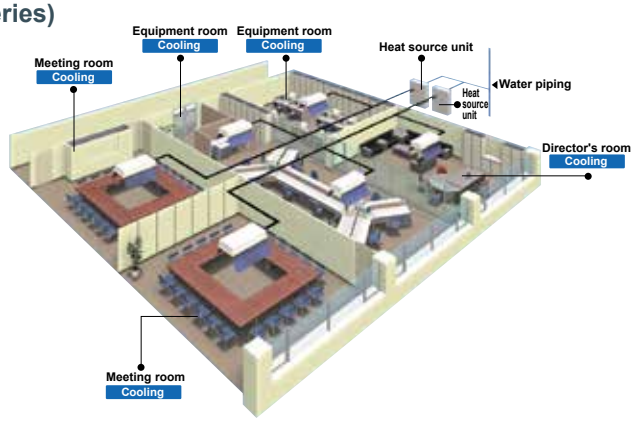
WR2 series — PQRY-P YHM-A
PQRY-P YSHM-A

[WY(Heat Pump) series]

Water energy source system allows switching between cooling and heating

The WY-Series has all the benefits of the Y-Series using water source condensing units.
Condensing units can be situated inside the building allowing greater design flexibility and no limitation on building size. Depending on capacity, 17 to 50 indoor units can be connected to a single condensing unit with individualised and/or centralised control. The two-pipe system allows all CITY MULTI solutions to switch between cooling and heating while maintaining a constant indoor temperature.

Installation image (WY series)

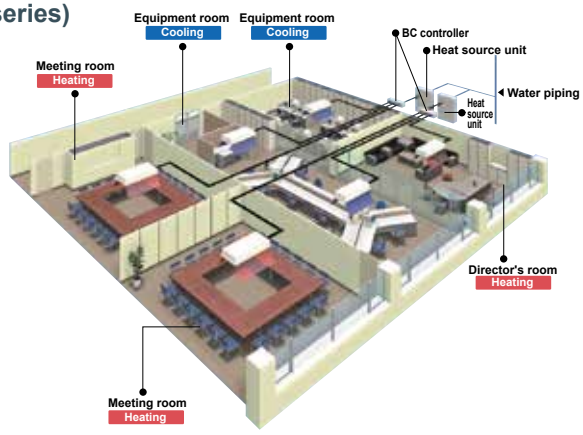


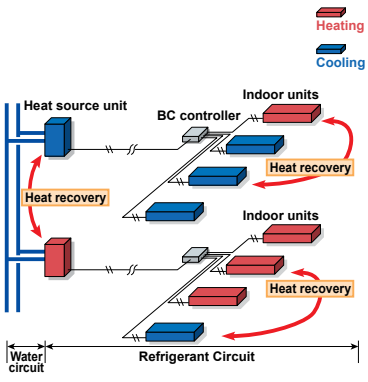
[WR2(Heat Recovery) series]

Advanced water heat source unit enjoying the benefits of R2 series

The CITY MULTI WR2 series provides all of the advantages of the R2 series with the added advantages of a water heat source system, making it suitable for a wider range of applications in high rises, frigid climates, coastal areas, etc.
Not only does it produce heat recovery from the indoor units on the same 2-pipe refrigerant circuit, it also produces heat recovery via the water circuit between heat source units, making it a very economical system.

Installation image (WR2 series)



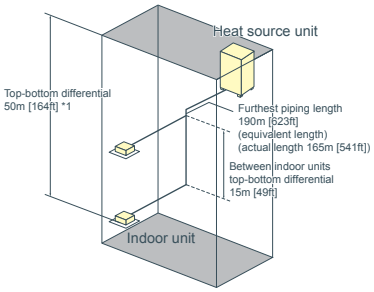


Double heat recovery (WR2)

System Pipe Lengths

[8-36HP (WY series)]

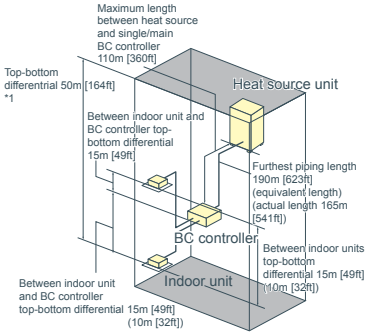
Refrigerant Piping Lengths	Maximum meters [Feet]
Total length (8-12HP)	300 [984]
Total length (16-36HP)	500 [1,640]
Maximum allowable length	165 (190equivalent) [541 (623)]
Farthest indoor from first branch	40 [131]
Vertical differentials between units	**Maximum meters [Feet]**
Indoor/heat source (heat source higher)	50 [164]
Indoor/heat source (heat source lower)	40 [131]
Indoor/indoor	15 [49]



*1 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m [131ft].

[8-24HP (WR2 series)]

Refrigerant Piping Lengths	Maximum meters [Feet]
Total length (8-12HP)	300-550 [984-1,804]
Total length (16-24HP)	500-750 [1,640-2,460]
Maximum allowable length	165 (190equivalent) [541 (623)]
Maximum length between heat source and single/main BC controller	110 [360]
*Maximum total length is dependent upon the distance between the outdoor unit and the single/main BC Controller.	
Maximum length between single/main BC controller and indoor	40-60 [131-196]
Vertical differentials between units	**Maximum meters [Feet]**
Indoor/ heat source (heat source higher)	50 [164]
Indoor/ heat source (heat source lower)	40 [131]
Indoor/BC controller (single/main)	15 [49]
Indoor/indoor	15 (10) [49 (32)]
Main BC Controller/Sub BC Controller	15 (10) [49 (32)]



*1 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m [131ft].

COP comparison (energy efficiency)

The new water cooled outdoor unit offers a greater efficiency with a higher COP compared to our YGM conventional model.

COP comparison

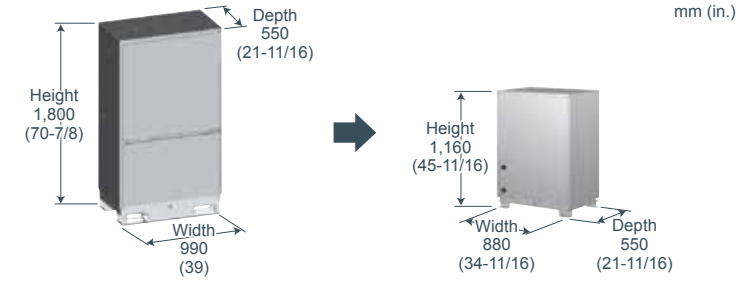
		HP	8	10	12	16	18	20	22	24	26	28	30	32	34	36
PQHY	YGM	Cooling	4.68	4.71	-	3.96	-	3.72	-	-	-	-	-	-	-	-
		Heating	4.68	4.71	-	3.96	-	3.72	-	-	-	-	-	-	-	-
	YHM	Cooling	5.71	5.13	4.55	5.45	5.08	4.89	4.68	4.45	5.22	5.13	4.94	4.69	4.52	4.34
		Heating	6.06	5.43	4.60	5.78	5.37	5.22	4.70	4.46	5.52	5.33	5.19	4.82	4.65	4.40
PQRY	YGM	Cooling	4.68	4.71	-	3.96	-	3.72	-	-	-	-	-	-	-	-
		Heating	5.33	5.43	-	4.54	-	4.63	-	-	-	-	-	-	-	-
	YHM	Cooling	5.65	5.08	4.50	5.40	5.03	4.84	4.63	4.41	-	-	-	-	-	-
		Heating	6.06	5.43	4.60	5.78	5.37	5.22	4.70	4.46	-	-	-	-	-	-

Compact design

Downsized by approximately 57%*, the new models enable an effective use of space.

*8/10/12HP

mm (in.)



■ P200, P250YGM (WY/WR2 series)

■ P200, P250, P300YHM (WY/WR2 series)

Weight reduction

The reduction in weight leads to easy transportation and installation.

Weight comparison unit : kg

	HP	8	10	12	16	18	20	22	24	26	28	30	32	34	36
PQHY	YGM	272	275	-	452	-	456	-	-	-	-	-	-	-	-
	YHM	195	195	195	390	390	390	390	390	585	585	585	585	585	585
PQRY	YGM	263	266	-	440	-	444	-	-	-	-	-	-	-	-
	YHM	181	181	181	362	362	362	362	362	-	-	-	-	-	-

OUTDOOR UNIT
S Series
PUMY-P VKM-A(-BS)

► Specifications

Model			PUMY-P112VKM-A (-BS)	PUMY-P125VKM-A (-BS)	PUMY-P140VKM-A (-BS)
Power source			1-phase 230V 50Hz	1-phase 230V 50Hz	1-phase 230V 50Hz
Cooling capacity (Nominal)	*1	kW	12.5	14.0	15.5
	*1	BTU / h	42,700	47,800	52,900
	Power input	kW	2.79	3.46	4.52
	Current input	A	12.32	15.27	19.95
	AEER/EER	kW / kW	4.13/4.48	3.76/4.05	3.22/3.43
Temp. range of cooling	Indoor temp.	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Outdoor temp.	D.B.	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)
Heating capacity (Nominal)	*2	kW	14.0	16.0	18.0
	*2	BTU / h	47,800	54,600	61,400
	Power input	kW	3.13	3.74	4.47
	Current input	A	13.82	16.51	19.73
	ACOP/COP	kW / kW	4.20/4.47	4.03/4.28	3.81/4.03
Temp. range of heating	Indoor temp.	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Outdoor temp.	W.B.	-20.0°C(-4°F)	-20.0°C(-4°F)	-20.0°C(-4°F)
Indoor unit connectable	Total capacity		50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity
	Model / Quantity		P15~P140/9	P15~P140/10	P15~P140/12
Sound pressure level (measured in anechoic room)		dB <A>	49/51	50/52	51/54
Refrigerant piping diameter	Liquid pipe	mm (in.)	9.52(3/8) Flare	9.52(3/8) Flare	9.52(3/8) Flare
	Gas pipe	mm (in.)	15.88(5/8) Flare	15.88(5/8) Flare	15.88(5/8) Flare
FAN	Type x Quantity		Propeller Fan x 2	Propeller Fan x 2	Propeller Fan x 2
	Air flow rate	m^3/min	110	110	120
		L/s	1,833	1,833	2,000
		cfm	3,884	3,884	4,237
	Motor output	kW	0.06 + 0.06	0.06 + 0.06	0.06 + 0.06
Compressor	Type x Quantity		Scroll hermetic compressor x 1	Scroll hermetic compressor x 1	Scroll hermetic compressor x 1
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	3.0	3.5	4.0
External finish			Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1
External dimension HxWxD		mm	1,338 x 1,050 x 330 (+25)	1,338 x 1,050 x 330 (+25)	1,338 x 1,050 x 330 (+25)
		in.	52-11/16 x 41-11/32 x 13 (+1)	52-11/16 x 41-11/32 x 13 (+1)	52-11/16 x 41-11/32 x 13 (+1)
Protection devices	High pressure protection		High pressure Switch	High pressure Switch	High pressure Switch
	Inverter circuit (COMP./FAN)		Overcurrent detection, Overheat detection (Heatsink thermistor)	Overcurrent detection, Overheat detection (Heatsink thermistor)	Overcurrent detection, Overheat detection (Heatsink thermistor)
	Compressor		Compressor thermistor, Over current detection	Compressor thermistor, Over current detection	Compressor thermistor, Over current detection
	Fan motor		Overheating, Voltage protection	Overheating, Voltage protection	Overheating, Voltage protection
Refrigerant	Type x original charge		R410A 4.8kg	R410A 4.8kg	R410A 4.8kg
Net weight		kg (lbs)	123(272)	123(272)	123(272)
Heat exchanger			Plate fin coil	Plate fin coil	Plate fin coil
Defrosting method			Reversed refrigerant circuit	Reversed refrigerant circuit	Reversed refrigerant circuit
Optional parts			Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB(95ºF DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*Nominal condition *1,*2 are subject to ISO 15042.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
S Series
PUMY-P YKM-A(-BS)

► Specifications

Model			PUMY-P112YKM-A (-BS)	PUMY-P125YKM-A (-BS)	PUMY-P140YKM-A (-BS)
Power source			3-phase 400V 50Hz	3-phase 400V 50Hz	3-phase 400V 50Hz
Cooling capacity (Nominal)	*1	kW	12.5	14.0	15.5
	*1	BTU / h	42,700	47,800	52,900
	Power input	kW	2.79	3.46	4.52
	Current input	A	4.24	5.26	6.87
	AEER/EER	kW / kW	4.07/4.48	3.71/4.05	3.19/3.43
Temp. range of cooling	Indoor temp.	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Outdoor temp.	D.B.	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)
Heating capacity (Nominal)	*2	kW	14.0	16.0	18.0
	*2	BTU / h	47,800	54,600	61,400
	Power input	kW	3.13	3.74	4.47
	Current input	A	4.76	5.68	6.79
	ACOP/COP	kW / kW	4.14/4.47	3.99/4.28	3.78/4.03
Temp. range of heating	Indoor temp.	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Outdoor temp.	W.B.	-20.0°C(-4°F)	-20.0°C(-4°F)	-20.0°C(-4°F)
Indoor unit connectable	Total capacity		50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity
	Model / Quantity		P15~P140/9	P15~P140/10	P15~P140/12
Sound pressure level (measured in anechoic room)		dB <A>	49/51	50/52	51/54
Refrigerant piping diameter	Liquid pipe	mm (in.)	9.52(3/8) Flare	9.52(3/8) Flare	9.52(3/8) Flare
	Gas pipe	mm (in.)	15.88(5/8) Flare	15.88(5/8) Flare	15.88(5/8) Flare
FAN	Type x Quantity		Propeller Fan x 2	Propeller Fan x 2	Propeller Fan x 2
	Air flow rate	m^3/min	110	110	120
		L/s	1,833	1,833	2,000
		cfm	3,884	3,884	4,237
	Motor output	kW	0.06 + 0.06	0.06 + 0.06	0.06 + 0.06
Compressor	Type x Quantity		Scroll hermetic compressor x 1	Scroll hermetic compressor x 1	Scroll hermetic compressor x 1
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	3.0	3.5	4.0
External finish			Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1
External dimension HxWxD		mm	1,338 x 1,050 x 330 (+25)	1,338 x 1,050 x 330 (+25)	1,338 x 1,050 x 330 (+25)
		in.	52-11/16 x 41-11/32 x 13 (+1)	52-11/16 x 41-11/32 x 13 (+1)	52-11/16 x 41-11/32 x 13 (+1)
Protection devices	High pressure protection		High pressure Switch	High pressure Switch	High pressure Switch
	Inverter circuit (COMP./FAN)		Overcurrent detection, Overheat detection (Heatsink thermistor)	Overcurrent detection, Overheat detection (Heatsink thermistor)	Overcurrent detection, Overheat detection (Heatsink thermistor)
	Compressor		Compressor thermistor, Over current detection	Compressor thermistor, Over current detection	Compressor thermistor, Over current detection
	Fan motor		Overheating, Voltage protection	Overheating, Voltage protection	Overheating, Voltage protection
Refrigerant	Type x original charge		R410A 4.8kg	R410A 4.8kg	R410A 4.8kg
Net weight		kg (lbs)	125(276)	125(276)	125(276)
Heat exchanger			Plate fin coil	Plate fin coil	Plate fin coil
Defrosting method			Reversed refrigerant circuit	Reversed refrigerant circuit	Reversed refrigerant circuit
Optional parts			Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB(95ºF DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*Nominal condition *1,*2 are subject to ISO 15042.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
Y Series
PUHY-P YKB-A(-BS)

► Specifications

Model			PUHY-P200YKB-A (-BS)	PUHY-P250YKB-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	22.4	28.0
	*1	BTU / h	76,400	95,500
	Power input	kW	6.12	8.09
	Current input	A	10.3-9.8-9.4	13.6-12.9-12.5
	EER	kW / kW	3.66	3.46
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	25.0	31.5
	*2	BTU / h	85,300	107,500
	Power input	kW	6.15	8.33
	Current input	A	10.3-9.8-9.5	14.0-13.3-12.8
	COP	kW / kW	4.06	3.78
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P15~P250/1~17	P15~P250/1~21
Sound pressure level (measured in anechoic room)		dB <A>	57	59
Sound power level (measured in anechoic room)		dB <A>	78	79
Refrigerant piping diameter	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed (12.7 (1/2) Brazed, farthest length >= 90 m)
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	175	175
		L/s	2,917	2,917
		cfm	6,179	6,179
	Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 1	0.92 x 1
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter
	Motor output	kW	5.5	6.9
	Case heater	kW	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>
External dimension HxWxD		mm	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740
		in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		Over-heat protection	Over-heat protection
	Fan motor		Over-current protection	Over-current protection
Refrigerant	Type x original charge		R410A x 6.5 kg (15 lbs)	R410A x 8.0 kg (18 lbs)
Net weight		kg (lbs)	190 (419)	199 (439)
Heat exchanger			Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube
Optional parts			Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
Y Series
PUHY-P YKB-A(-BS)

► Specifications

Model			PUHY-P300YKB-A (-BS)	PUHY-P350YKB-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	33.5	40.0
	*1	BTU / h	114,300	136,500
	Power input	kW	9.49	11.79
	Current input	A	16.0-15.2-14.6	19.9-18.9-18.2
	EER	kW / kW	3.53	3.39
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	37.5	45.0
	*2	BTU / h	128,000	153,500
	Power input	kW	9.89	13.23
	Current input	A	16.6-15.8-15.2	22.3-21.2-20.4
	COP	kW / kW	3.79	3.40
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P15~P250/1~26	P15~P250/1~30
Sound pressure level (measured in anechoic room)		dB <A>	61	61
Sound power level (measured in anechoic room)		dB <A>	83	83
Refrigerant piping diameter	Liquid pipe	mm (in.)	9.52 (3/8) Brazed (12.7 (1/2) Brazed, farthest length >= 40 m)	12.7 (1/2) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	210	210
		L/s	3,500	3,500
		cfm	7,415	7,415
	Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 1	0.92 x 1
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter
	Motor output	kW	8.1	10.5
	Case heater	kW	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>
External dimension HxWxD		mm	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740
		in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		Over-heat protection	Over-heat protection
	Fan motor		Over-current protection	Over-current protection
Refrigerant	Type x original charge		R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)
Net weight		kg (lbs)	251 (554)	251 (554)
Heat exchanger			Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & copper tube
Optional parts			Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2 Header: CMY-Y104/108/1010-G

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
Y Series
PUHY-P YSKB-A(-BS)

► Specifications

Model			PUHY-P400YSKB-A (-BS)	PUHY-P450YSKB-A (-BS)	PUHY-P500YSKB-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	45.0	50.0	56.0
	*1	BTU / h	153,500	170,600	191,100
	Power input	kW	12.96	14.74	16.91
	Current input	A	21.8-20.7-20.0	24.8-23.6-22.7	28.5-27.1-26.1
	EER	kW / kW	3.47	3.39	3.31
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	50.0	56.0	63.0
	*2	BTU / h	170,600	191,100	215,000
	Power input	kW	12.98	15.05	17.54
	Current input	A	21.9-20.8-20.0	25.4-24.1-23.2	29.6-28.1-27.1
	COP	kW / kW	3.85	3.72	3.59
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P15~P250/1~34	P15~P250/1~39	P15~P250/1~43
Sound pressure level (measured in anechoic room)		dB <A>	60	61.5	62
Sound power level (measured in anechoic room)		dB <A>	81	82	82
Refrigerant piping diameter	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model

Model			PUHY-P200YKB-A (-BS)	PUHY-P200YKB-A (-BS)	PUHY-P200YKB-A (-BS)	PUHY-P250YKB-A (-BS)	PUHY-P250YKB-A (-BS)	PUHY-P250YKB-A (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	175	175	175	175	175	175
		L/s	2,917	2,917	2,917	2,917	2,917	2,917
		cfm	6,179	6,179	6,179	6,179	6,179	6,179
	Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.5	5.5	5.5	6.9	6.9	6.9
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740
		in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection	Over-current protection	Over-current protection	Over-current protection	Over-current protection	Over-current protection
Refrigerant	Type x original charge		R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)
Net weight		kg (lbs)	190 (419)	190 (419)	190 (419)	199 (439)	199 (439)	199 (439)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
Y Series
PUHY-P YSKB-A(-BS)

► Specifications

Model			PUHY-P550YSKB-A (-BS)	PUHY-P600YSKB-A (-BS)	PUHY-P650YSKB-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	63.0	69.0	73.0
	*1	BTU / h	215,000	235,400	249,100
	Power input	kW	18.91	21.16	22.25
	Current input	A	31.9-30.3-29.2	35.7-33.9-32.7	37.5-35.6-34.3
	EER	kW / kW	3.33	3.26	3.28
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	69.0	76.5	81.5
	*2	BTU / h	235,400	261,000	278,100
	Power input	kW	19.22	22.43	23.90
	Current input	A	32.4-30.8-29.7	37.8-35.9-34.6	40.3-38.3-36.9
	COP	kW / kW	3.59	3.41	3.41
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P15~P250/2~47	P15~P250/2~50	P15~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	63.5	63.5	64
Sound power level (measured in anechoic room)		dB <A>	84.5	84.5	86
Refrigerant piping diameter	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model

Model			PUHY-P250YKB-A (-BS)	PUHY-P300YKB-A (-BS)	PUHY-P250YKB-A (-BS)	PUHY-P350YKB-A (-BS)	PUHY-P300YKB-A (-BS)	PUHY-P350YKB-A (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	175	210	175	210	210	210
		L/s	2,917	3,500	2,917	3,500	3,500	3,500
		cfm	6,179	7,415	6,179	7,415	7,415	7,415
	Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	6.9	8.1	6.9	10.5	8.1	10.5
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740
		in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection	Over-current protection	Over-current protection	Over-current protection	Over-current protection	Over-current protection
Refrigerant	Type x original charge		R410A x 8.0 kg (18 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)
Net weight		kg (lbs)	199 (439)	251 (554)	199 (439)	251 (554)	251 (554)	251 (554)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	12.7 (1/2) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
Y Series
PUHY-P YSKB-A(-BS)

► Specifications

Model			PUHY-P700YSKB-A (-BS)	PUHY-P750YSKB-A (-BS)	PUHY-P800YSKB-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	80.0	85.0	90.0
	*1	BTU / h	273,000	290,000	307,100
	Power input	kW	24.84	27.68	29.50
	Current input	A	41.9-39.8-38.3	46.7-44.3-42.7	49.8-47.3-45.6
	EER	kW / kW	3.22	3.07	3.05
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	88.0	95.0	100.0
	*2	BTU / h	300,300	324,100	341,200
	Power input	kW	27.24	29.68	31.54
	Current input	A	45.9-43.6-42.1	50.1-47.5-45.8	53.2-50.5-48.7
	COP	kW / kW	3.23	3.20	3.17
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P15~P250/2~50	P15~P250/2~50	P15~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	64	65.5	67.5
Sound power level (measured in anechoic room)		dB <A>	86	86	87.5
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	34.93 (1-3/8) Brazed	34.93 (1-3/8) Brazed	34.93 (1-3/8) Brazed

Set Model

Model			PUHY-P350YKB-A (-BS)	PUHY-P350YKB-A (-BS)	PUHY-P350YKB-A (-BS)	PUHY-P400YKB-A (-BS)	PUHY-P350YKB-A (-BS)	PUHY-P450YKB-A (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 2
	Air flow rate	m^3/min	210	210	210	210	210	360
		L/s	3,500	3,500	3,500	3,500	3,500	6,000
		cfm	7,415	7,415	7,415	7,415	7,415	12,712
	Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 2
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.5	10.5	10.5	10.8	10.5	12.4
	Case heater	kW	–	–	–	–	–	0.045
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,750 x 740
		in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection	Over-current protection	Over-current protection	Over-current protection	Over-current protection	Over-current protection
Refrigerant	Type x original charge		R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.8 kg (27 lbs)
Net weight		kg (lbs)	251 (554)	251 (554)	251 (554)	251 (554)	251 (554)	304 (671)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
Y Series
PUHY-P YSKB-A(-BS)

► Specifications

Model			PUHY-P850YSKB-A (-BS)	PUHY-P900YSKB-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	96.0	101.0
	*1	BTU / h	327,600	344,600
	Power input	kW	33.10	35.06
	Current input	A	55.8-53.0-51.1	59.1-56.2-54.1
	EER	kW / kW	2.90	2.88
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	108.0	113.0
	*2	BTU / h	368,500	385,600
	Power input	kW	34.28	36.21
	Current input	A	57.8-54.9-52.9	61.1-58.0-55.9
	COP	kW / kW	3.15	3.12
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P15~P250/2~50	P15~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	68	69
Sound power level (measured in anechoic room)		dB <A>	87.5	88
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model

Model			PUHY-P400YKB-A (-BS)	PUHY-P450YKB-A (-BS)	PUHY-P450YKB-A (-BS)	PUHY-P450YKB-A (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	210	360	360	360
		L/s	3,500	6,000	6,000	6,000
		cfm	7,415	12,712	12,712	12,712
	Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 2	0.92 x 2	0.92 x 2
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.8	12.4	12.4	12.4
	Case heater	kW	–	0.045	0.045	0.045
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740
		in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection	Over-current protection	Over-current protection	Over-current protection
Refrigerant	Type x original charge		R410A x 11.5 kg (26 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)
Net weight		kg (lbs)	251 (554)	304 (671)	304 (671)	304 (671)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
Y Series
PUHY-P YSKB-A(-BS)

► Specifications

Model			PUHY-P950YSKB-A (-BS)	PUHY-P1000YSKB-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	108.0	113.0
	*1	BTU / h	368,500	385,600
	Power input	kW	33.85	35.20
	Current input	A	57.1-54.2-52.3	59.4-56.4-54.4
	EER	kW / kW	3.19	3.21
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	119.5	127.0
	*2	BTU / h	407,700	433,300
	Power input	kW	34.63	36.70
	Current input	A	58.4-55.5-53.5	61.9-58.8-56.7
	COP	kW / kW	3.45	3.46
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P15~P250/2~50	P15~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	66.5	66.5
Sound power level (measured in anechoic room)		dB <A>	87	88
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model

Model			PUHY-P250YKB-A (-BS)	PUHY-P300YKB-A (-BS)	PUHY-P400YKB-A (-BS)	PUHY-P300YKB-A (-BS)	PUHY-P300YKB-A (-BS)	PUHY-P400YKB-A (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	175	210	210	210	210	210
		L/s	2,917	3,500	3,500	3,500	3,500	3,500
		cfm	6,179	7,415	7,415	7,415	7,415	7,415
	Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	6.9	8.1	10.8	8.1	8.1	10.8
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD		mm	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740
		in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection	Over-current protection	Over-current protection	Over-current protection	Over-current protection	Over-current protection
Refrigerant	Type x original charge		R410A x 8.0 kg (18 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)
Net weight		kg (lbs)	199 (439)	251 (554)	251 (554)	251 (554)	251 (554)	251 (554)
Heat exchanger			Salt-resistant cross fin & copper tube			Salt-resistant cross fin & copper tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
Y Series
PUHY-P YSKB-A(-BS)

► Specifications

Model			PUHY-P1050YSKB-A (-BS)	PUHY-P1100YSKB-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	118.0	124.0
	*1	BTU / h	402,600	423,100
	Power input	kW	37.34	39.74
	Current input	A	63.0-59.8-57.7	67.0-63.7-61.4
	EER	kW / kW	3.16	3.12
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	132.0	140.0
	*2	BTU / h	450,400	477,700
	Power input	kW	39.63	43.61
	Current input	A	66.9-63.5-61.2	73.6-69.9-67.4
	COP	kW / kW	3.33	3.21
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P15~P250/2~50	P15~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	66.5	66.5
Sound power level (measured in anechoic room)		dB <A>	88	88
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model

Model			PUHY-P300YKB-A (-BS)	PUHY-P350YKB-A (-BS)	PUHY-P400YKB-A (-BS)	PUHY-P350YKB-A (-BS)	PUHY-P350YKB-A (-BS)	PUHY-P400YKB-A (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	210	210	210	210	210	210
		L/s	3,500	3,500	3,500	3,500	3,500	3,500
		cfm	7,415	7,415	7,415	7,415	7,415	7,415
	Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.1	10.5	10.8	10.5	10.5	10.8
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD		mm	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740
		in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection	Over-current protection	Over-current protection	Over-current protection	Over-current protection	Over-current protection
Refrigerant	Type x original charge		R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)
Net weight		kg (lbs)	251 (554)	251 (554)	251 (554)	251 (554)	251 (554)	251 (554)
Heat exchanger			Salt-resistant cross fin & copper tube			Salt-resistant cross fin & copper tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
Y Series
PUHY-P YSKB-A(-BS)

► Specifications

Model			PUHY-P1150YSKB-A (-BS)	PUHY-P1200YSKB-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	130.0	136.0
	*1	BTU / h	443,600	464,000
	Power input	kW	41.93	45.18
	Current input	A	70.7-67.2-64.8	76.2-72.4-69.8
	EER	kW / kW	3.10	3.01
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	145.0	150.0
	*2	BTU / h	494,700	511,800
	Power input	kW	45.45	47.31
	Current input	A	76.7-72.8-70.2	79.8-75.8-73.1
	COP	kW / kW	3.19	3.17
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P15~P250/2~50	P15~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	68.5	69
Sound power level (measured in anechoic room)		dB <A>	88.5	88.5
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model

Model			PUHY-P350YKB-A (-BS)	PUHY-P350YKB-A (-BS)	PUHY-P450YKB-A (-BS)	PUHY-P350YKB-A (-BS)	PUHY-P400YKB-A (-BS)	PUHY-P450YKB-A (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 2	Propeller fan x 1	Propeller fan x 1	Propeller fan x 2
	Air flow rate	m^3/min	210	210	360	210	210	360
		L/s	3,500	3,500	6,000	3,500	3,500	6,000
		cfm	7,415	7,415	12,712	7,415	7,415	12,712
	Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 2	0.92 x 1	0.92 x 1	0.92 x 2
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.5	10.5	12.4	10.5	10.8	12.4
	Case heater	kW	–	–	0.045	–	–	0.045
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD		mm	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,750 x 740
		in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection	Over-current protection	Over-current protection	Over-current protection	Over-current protection	Over-current protection
Refrigerant	Type x original charge		R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.8 kg (27 lbs)
Net weight		kg (lbs)	251 (554)	251 (554)	304 (671)	251 (554)	251 (554)	304 (671)
Heat exchanger			Salt-resistant cross fin & copper tube			Salt-resistant cross fin & copper tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
Y Series
PUHY-P YSKB-A(-BS)

► Specifications

Model			PUHY-P1250YSKB-A (-BS)	PUHY-P1300YSKB-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	140.0	146.0
	*1	BTU / h	477,700	498,200
	Power input	kW	46.82	50.51
	Current input	A	79.0-75.0-72.3	85.2-81.0-78.0
	EER	kW / kW	2.99	2.89
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	156.5	163.0
	*2	BTU / h	534,000	556,200
	Power input	kW	49.52	51.91
	Current input	A	83.5-79.4-76.5	87.6-83.2-80.2
	COP	kW / kW	3.16	3.14
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P15~P250/2~50	P15~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	70	70
Sound power level (measured in anechoic room)		dB <A>	89.5	89.5
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model

Model			PUHY-P350YKB-A (-BS)	PUHY-P450YKB-A (-BS)	PUHY-P450YKB-A (-BS)	PUHY-P400YKB-A (-BS)	PUHY-P450YKB-A (-BS)	PUHY-P450YKB-A (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 2	Propeller fan x 2	Propeller fan x 1	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	210	360	360	210	360	360
		L/s	3,500	6,000	6,000	3,500	6,000	6,000
		cfm	7,415	12,712	12,712	7,415	12,712	12,712
	Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 2	0.92 x 2	0.92 x 1	0.92 x 2	0.92 x 2
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.5	12.4	12.4	10.8	12.4	12.4
	Case heater	kW	–	0.045	0.045	–	0.045	0.045
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD		mm	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740
		in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection	Over-current protection	Over-current protection	Over-current protection	Over-current protection	Over-current protection
Refrigerant	Type x original charge		R410A x 11.5 kg (26 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)
Net weight		kg (lbs)	251 (554)	304 (671)	304 (671)	251 (554)	304 (671)	304 (671)
Heat exchanger			Salt-resistant cross fin & copper tube			Salt-resistant cross fin & copper tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
Y Series
PUHY-P YSKB-A(-BS)

► Specifications

Model			PUHY-P1350YSKB-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	150.0
	*1	BTU / h	511,800
	Power input	kW	52.08
	Current input	A	87.9-83.5-80.5
	EER	kW / kW	2.88
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	168.0
	*2	BTU / h	573,200
	Power input	kW	53.84
	Current input	A	90.8-86.3-83.2
	COP	kW / kW	3.12
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity
	Model / Quantity		P15~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	71
Sound power level (measured in anechoic room)		dB <A>	90
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed

Set Model

Model			PUHY-P450YKB-A (-BS)	PUHY-P450YKB-A (-BS)	PUHY-P450YKB-A (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	360	360	360
		L/s	6,000	6,000	6,000
		cfm	12,712	12,712	12,712
	Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 2	0.92 x 2	0.92 x 2
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	12.4	12.4	12.4
	Case heater	kW	0.045	0.045	0.045
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>
External dimension HxWxD		mm	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740
		in.	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection	Over-current protection	Over-current protection
Refrigerant	Type x original charge		R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)
Net weight		kg (lbs)	304 (671)	304 (671)	304 (671)
Heat exchanger			Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube
Pipe between unit and distributor	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
Y Series - High COP
PUHY-EP YLM-A(-BS)

► Specifications

Model			PUHY-EP200YLM-A (-BS)	PUHY-EP250YLM-A (-BS)	PUHY-EP300YLM-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	22.4	28.0	33.5
	*1	BTU / h	76,400	95,500	114,300
	Power input	kW	5.19	6.89	8.56
	Current input	A	8.7-8.3-8.0	11.6-11.0-10.6	14.4-13.7-13.2
	EER	kW / kW	4.31	4.06	3.91
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	25.0	31.5	37.5
	*2	BTU / h	85,300	107,500	128,000
	Power input	kW	5.73	7.68	9.16
	Current input	A	9.6-9.1-8.8	12.9-12.3-11.8	15.4-14.6-14.1
	COP	kW / kW	4.36	4.10	4.09
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P15~P250/1~17	P15~P250/1~21	P15~P250/1~26
Sound pressure level (measured in anechoic room)		dB <A>	57	60	61
Sound power level (measured in anechoic room)		dB <A>	79.5	80	82
Refrigerant piping diameter	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed (12.7 (1/2) Brazed, farthest length >= 90 m)	9.52 (3/8) Brazed (12.7 (1/2) Brazed, farthest length >= 40 m)
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	175	175	200
		L/s	2,917	2,917	3,333
		cfm	6,179	6,179	7,062
	Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	5.6	6.9	8.1
	Case heater	kW	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>
External dimension HxWxD		mm	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 1,220 x 740
		in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection	Over-current protection	Over-current protection
Refrigerant	Type x original charge		R410A x 7.5 kg (17 lbs)	R410A x 7.5 kg (17 lbs)	R410A x 10.3 kg (23 lbs)
Net weight		kg (lbs)	208 (459)	208 (459)	252 (556)
Heat exchanger			Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube
Optional parts			Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G

HIGH COP

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
Y Series - High COP
PUHY-EP YLM-A(-BS)

► Specifications

Model			PUHY-EP350YLM-A (-BS)	PUHY-EP400YLM-A (-BS)	PUHY-EP450YLM-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	40.0	45.0	50.0
	*1	BTU / h	136,500	153,500	170,600
	Power input	kW	11.69	12.26	14.79
	Current input	A	19.7-18.7-18.0	20.6-19.6-18.9	24.9-23.7-22.8
	EER	kW / kW	3.42	3.67	3.38
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	45.0	50.0	56.0
	*2	BTU / h	153,500	170,600	191,100
	Power input	kW	12.53	13.15	16.09
	Current input	A	21.1-20.0-19.3	22.1-21.0-20.3	27.1-25.8-24.8
	COP	kW / kW	3.59	3.80	3.48
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P15~P250/1~30	P15~P250/1~34	P15~P250/1~39
Sound pressure level (measured in anechoic room)		dB <A>	61	62.5	63
Sound power level (measured in anechoic room)		dB <A>	82.5	82.5	83
Refrigerant piping diameter	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	200	320	370
		L/s	3,333	5,333	6,167
		cfm	7,062	11,299	13,065
	Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 1	0.92 x 2	0.92 x 2
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	10.5	10.9	12.4
	Case heater	kW	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>
External dimension HxWxD		mm	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740
		in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection	Over-current protection	Over-current protection
Refrigerant	Type x original charge		R410A x 10.3 kg (23 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)
Net weight		kg (lbs)	252 (556)	318 (702)	318 (702)
Heat exchanger			Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube
Optional parts			Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2 Header: CMY-Y104/108/1010-G

HIGH COP

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
Y Series - High COP
PUHY-EP YSLM-A(-BS)

► Specifications

Model			PUHY-EP500YSLM-A (-BS)	PUHY-EP550YSLM-A (-BS)	PUHY-EP600YSLM-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	56.0	63.0	69.0
	*1	BTU / h	191,100	215,000	235,400
	Power input	kW	14.50	16.62	18.59
	Current input	A	24.4-23.2-22.4	28.0-26.6-25.6	31.3-29.8-28.7
	EER	kW / kW	3.86	3.79	3.71
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	63.0	69.0	76.5
	*2	BTU / h	215,000	235,400	261,000
	Power input	kW	16.15	17.73	19.66
	Current input	A	27.2-25.9-24.9	29.9-28.4-27.4	33.1-31.5-30.3
	COP	kW / kW	3.90	3.89	3.89
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P15~P250/1~43	P15~P250/2~47	P15~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	63	63.5	64
Sound power level (measured in anechoic room)		dB <A>	83	84.5	85
Refrigerant piping diameter	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model

Model			PUHY-EP250YLM-A (-BS)	PUHY-EP250YLM-A (-BS)	PUHY-EP250YLM-A (-BS)	PUHY-EP300YLM-A (-BS)	PUHY-EP300YLM-A (-BS)	PUHY-EP300YLM-A (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	175	175	175	200	200	200
		L/s	2,917	2,917	2,917	3,333	3,333	3,333
		cfm	6,179	6,179	6,179	7,062	7,062	7,062
	Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	6.9	6.9	6.9	8.1	8.1	8.1
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740
		in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection		Over-current protection		Over-current protection	
Refrigerant	Type x original charge		R410A x 7.5 kg (17 lbs)	R410A x 7.5 kg (17 lbs)	R410A x 7.5 kg (17 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)
Net weight		kg (lbs)	208 (459)	208 (459)	208 (459)	252 (556)	252 (556)	252 (556)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G	

HIGH COP

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
Y Series - High COP
PUHY-EP YSLM-A(-BS)

► Specifications

Model			PUHY-EP650YSLM-A (-BS)	PUHY-EP700YSLM-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	73.0	80.0
	*1	BTU / h	249,100	273,000
	Power input	kW	18.15	20.15
	Current input	A	30.6-29.1-28.0	34.0-32.3-31.1
	EER	kW / kW	4.02	3.97
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	81.5	88.0
	*2	BTU / h	278,100	300,300
	Power input	kW	20.07	21.67
	Current input	A	33.8-32.1-31.0	36.5-34.7-33.4
	COP	kW / kW	4.06	4.06
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P15~P250/2~50	P15~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	63	63.5
Sound power level (measured in anechoic room)		dB <A>	84.5	85.5
Refrigerant piping diameter	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed

Set Model

Model			PUHY-EP200YLM-A (-BS)	PUHY-EP200YLM-A (-BS)	PUHY-EP250YLM-A (-BS)	PUHY-EP200YLM-A (-BS)	PUHY-EP200YLM-A (-BS)	PUHY-EP300YLM-A (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	175	175	175	175	175	200
		L/s	2,917	2,917	2,917	2,917	2,917	3,333
		cfm	6,179	6,179	6,179	6,179	6,179	7,062
	Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.6	5.6	6.9	5.6	5.6	8.1
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD		mm	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 1,220 x 740
		in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection			Over-current protection		
Refrigerant	Type x original charge		R410A x 7.5 kg (17 lbs)	R410A x 7.5 kg (17 lbs)	R410A x 7.5 kg (17 lbs)	R410A x 7.5 kg (17 lbs)	R410A x 7.5 kg (17 lbs)	R410A x 10.3 kg (23 lbs)
Net weight		kg (lbs)	208 (459)	208 (459)	208 (459)	208 (459)	208 (459)	252 (556)
Heat exchanger			Salt-resistant cross fin & aluminium tube			Salt-resistant cross fin & aluminium tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

HIGH COP

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
Y Series - High COP
PUHY-EP YSLM-A(-BS)

► Specifications

Model			PUHY-EP750YSLM-A (-BS)	PUHY-EP800YSLM-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	85.0	90.0
	*1	BTU / h	290,000	307,100
	Power input	kW	21.85	23.43
	Current input	A	36.8-35.0-33.7	39.5-37.5-36.2
	EER	kW / kW	3.89	3.84
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	95.0	100.0
	*2	BTU / h	324,100	341,200
	Power input	kW	23.92	25.18
	Current input	A	40.3-38.3-36.9	42.5-40.3-38.9
	COP	kW / kW	3.97	3.97
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P15~P250/2~50	P15~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	64.5	65
Sound power level (measured in anechoic room)		dB <A>	85.5	86.5
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	34.93 (1-3/8) Brazed	34.93 (1-3/8) Brazed

Set Model

Model			PUHY-EP200YLM-A (-BS)	PUHY-EP250YLM-A (-BS)	PUHY-EP300YLM-A (-BS)	PUHY-EP200YLM-A (-BS)	PUHY-EP300YLM-A (-BS)	PUHY-EP300YLM-A (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	175	175	200	175	200	200
		L/s	2,917	2,917	3,333	2,917	3,333	3,333
		cfm	6,179	6,179	7,062	6,179	7,062	7,062
	Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.6	6.9	8.1	5.6	8.1	8.1
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD		mm	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740
		in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection			Over-current protection		
Refrigerant	Type x original charge		R410A x 7.5 kg (17 lbs)	R410A x 7.5 kg (17 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 7.5 kg (17 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)
Net weight		kg (lbs)	208 (459)	208 (459)	252 (556)	208 (459)	252 (556)	252 (556)
Heat exchanger			Salt-resistant cross fin & aluminium tube			Salt-resistant cross fin & aluminium tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

HIGH COP

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
Y Series - High COP
PUHY-EP YSLM-A(-BS)

► Specifications

Model			PUHY-EP850YSLM-A (-BS)	PUHY-EP900YSLM-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	96.0	101.0
	*1	BTU / h	327,600	344,600
	Power input	kW	25.53	27.22
	Current input	A	43.0-40.9-39.4	45.9-43.6-42.0
	EER	kW / kW	3.76	3.71
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	108.0	113.0
	*2	BTU / h	368,500	385,600
	Power input	kW	27.76	29.04
	Current input	A	46.8-44.5-42.9	49.0-46.5-44.8
	COP	kW / kW	3.89	3.89
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P15~P250/2~50	P15~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	65.5	66
Sound power level (measured in anechoic room)		dB <A>	86.5	87
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model

Model			PUHY-EP250YLM-A (-BS)	PUHY-EP300YLM-A (-BS)	PUHY-EP300YLM-A (-BS)	PUHY-EP300YLM-A (-BS)	PUHY-EP300YLM-A (-BS)	PUHY-EP300YLM-A (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	175	200	200	200	200	200
		L/s	2,917	3,333	3,333	3,333	3,333	3,333
		cfm	6,179	7,062	7,062	7,062	7,062	7,062
	Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	6.9	8.1	8.1	8.1	8.1	8.1
	Case heater	kW	–	–	–	–	–	-
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD		mm	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740
		in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection			Over-current protection		
Refrigerant	Type x original charge		R410A x 7.5 kg (17 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)
Net weight		kg (lbs)	208 (459)	252 (556)	252 (556)	252 (556)	252 (556)	252 (556)
Heat exchanger			Salt-resistant cross fin & aluminium tube			Salt-resistant cross fin & aluminium tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

HIGH COP

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
Y Series - High COP
PUHY-EP YSLM-A(-BS)

► Specifications

Model			PUHY-EP950YSLM-A (-BS)	PUHY-EP1000YSLM-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	108.0	113.0
	*1	BTU / h	368,500	385,600
	Power input	kW	30.33	31.04
	Current input	A	51.2-48.6-46.8	52.4-49.7-47.9
	EER	kW / kW	3.56	3.64
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	119.5	127.0
	*2	BTU / h	407,700	433,300
	Power input	kW	32.03	33.50
	Current input	A	54.0-51.3-49.5	56.5-53.7-51.7
	COP	kW / kW	3.73	3.79
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P15~P250/2~50	P15~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	66	66.5
Sound power level (measured in anechoic room)		dB <A>	87	87
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model

Model			PUHY-EP300YLM-A (-BS)	PUHY-EP300YLM-A (-BS)	PUHY-EP350YLM-A (-BS)	PUHY-EP300YLM-A (-BS)	PUHY-EP300YLM-A (-BS)	PUHY-EP400YLM-A (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 2
	Air flow rate	m^3/min	200	200	200	200	200	320
		L/s	3,333	3,333	3,333	3,333	3,333	5,333
		cfm	7,062	7,062	7,062	7,062	7,062	11,299
	Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 2
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.1	8.1	10.5	8.1	8.1	10.9
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD		mm	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,750 x 740
		in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection	Over-current protection	Over-current protection	Over-current protection	Over-current protection	Over-current protection
Refrigerant	Type x original charge		R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 11.8 kg (27 lbs)
Net weight		kg (lbs)	252 (556)	252 (556)	252 (556)	252 (556)	252 (556)	318 (702)
Heat exchanger			Salt-resistant cross fin & aluminium tube			Salt-resistant cross fin & aluminium tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

HIGH COP

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
Y Series - High COP
PUHY-EP YSLM-A(-BS)

► Specifications

Model			PUHY-EP1050YSLM-A (-BS)	PUHY-EP1100YSLM-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	118.0	124.0
	*1	BTU / h	402,600	423,100
	Power input	kW	34.40	38.15
	Current input	A	58.0-55.1-53.1	64.4-61.1-58.9
	EER	kW / kW	3.43	3.25
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	132.0	140.0
	*2	BTU / h	450,400	477,700
	Power input	kW	36.87	41.17
	Current input	A	62.2-59.1-56.9	69.5-66.0-63.6
	COP	kW / kW	3.58	3.40
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P15~P250/3~50	P15~P250/3~50
Sound pressure level (measured in anechoic room)		dB <A>	66.5	66.5
Sound power level (measured in anechoic room)		dB <A>	87.5	87.5
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model

Model			PUHY-EP300YLM-A (-BS)	PUHY-EP350YLM-A (-BS)	PUHY-EP400YLM-A (-BS)	PUHY-EP350YLM-A (-BS)	PUHY-EP350YLM-A (-BS)	PUHY-EP400YLM-A (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 2	Propeller fan x 1	Propeller fan x 1	Propeller fan x 2
	Air flow rate	m^3/min	200	200	320	200	200	320
		L/s	3,333	3,333	5,333	3,333	3,333	5,333
		cfm	7,062	7,062	11,299	7,062	7,062	11,299
	Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 2	0.92 x 1	0.92 x 1	0.92 x 2
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.1	10.5	10.9	10.5	10.5	10.9
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD		mm	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,750 x 740
		in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection	Over-current protection	Over-current protection	Over-current protection	Over-current protection	Over-current protection
Refrigerant	Type x original charge		R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 11.8 kg (27 lbs)
Net weight		kg (lbs)	252 (556)	252 (556)	318 (702)	252 (556)	252 (556)	318 (702)
Heat exchanger			Salt-resistant cross fin & aluminium tube			Salt-resistant cross fin & aluminium tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

HIGH COP

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
Y Series - High COP
PUHY-EP YSLM-A (-BS)

► Specifications

Model			PUHY-EP1150YSLM-A (-BS)	PUHY-EP1200YSLM-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	130.0	136.0
	*1	BTU / h	443,600	464,000
	Power input	kW	41.53	42.76
	Current input	A	70.1-66.6-64.1	72.1-68.5-66.0
	EER	kW / kW	3.13	3.18
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	145.0	150.0
	*2	BTU / h	494,700	511,800
	Power input	kW	44.47	45.45
	Current input	A	75.0-71.3-68.7	76.7-72.8-70.2
	COP	kW / kW	3.26	3.30
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P15~P250/3~50	P15~P250/3~50
Sound pressure level (measured in anechoic room)		dB <A>	66.5	67
Sound power level (measured in anechoic room)		dB <A>	87.5	87.5
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model

Model			PUHY-EP350YLM-A (-BS)	PUHY-EP350YLM-A (-BS)	PUHY-EP450YLM-A (-BS)	PUHY-EP350YLM-A (-BS)	PUHY-EP400YLM-A (-BS)	PUHY-EP450YLM-A (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 2	Propeller fan x 1	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	200	200	370	200	320	370
		L/s	3,333	3,333	6,167	3,333	5,333	6,167
		cfm	7,062	7,062	13,065	7,062	11,299	13,065
	Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 2	0.92 x 1	0.92 x 2	0.92 x 2
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.5	10.5	12.4	10.5	10.9	12.4
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD		mm	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740
		in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection	Over-current protection	Over-current protection	Over-current protection	Over-current protection	Over-current protection
Refrigerant	Type x original charge		R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)
Net weight		kg (lbs)	252 (556)	252 (556)	318 (702)	252 (556)	318 (702)	318 (702)
Heat exchanger			Salt-resistant cross fin & aluminium tube			Salt-resistant cross fin & aluminium tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

HIGH COP

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
Y Series - High COP
PUHY-EP YSLM-A (-BS)

► Specifications

Model			PUHY-EP1250YSLM-A (-BS)	PUHY-EP1300YSLM-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	140.0	146.0
	*1	BTU / h	477,700	498,200
	Power input	kW	45.90	46.94
	Current input	A	77.4-73.6-70.9	79.2-75.2-72.5
	EER	kW / kW	3.05	3.11
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	156.5	163.0
	*2	BTU / h	534,000	556,200
	Power input	kW	49.36	50.62
	Current input	A	83.3-79.1-76.2	85.4-81.1-78.2
	COP	kW / kW	3.17	3.22
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P15~P250/3~50	P15~P250/3~50
Sound pressure level (measured in anechoic room)		dB <A>	67.5	68
Sound power level (measured in anechoic room)		dB <A>	88	88
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model

Model			PUHY-EP350YLM-A (-BS)	PUHY-EP450YLM-A (-BS)	PUHY-EP450YLM-A (-BS)	PUHY-EP400YLM-A (-BS)	PUHY-EP450YLM-A (-BS)	PUHY-EP450YLM-A (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	200	370	370	320	370	370
		L/s	3,333	6,167	6,167	5,333	6,167	6,167
		cfm	7,062	13,065	13,065	11,299	13,065	13,065
	Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 2	0.92 x 2	0.92 x 2	0.92 x 2	0.92 x 2
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.5	12.4	12.4	10.9	12.4	12.4
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD		mm	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740
		in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection	Over-current protection	Over-current protection	Over-current protection	Over-current protection	Over-current protection
Refrigerant	Type x original charge		R410A x 10.3 kg (23 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)
Net weight		kg (lbs)	252 (556)	318 (702)	318 (702)	318 (702)	318 (702)	318 (702)
Heat exchanger			Salt-resistant cross fin & aluminium tube			Salt-resistant cross fin & aluminium tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

HIGH COP

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
Y Series - High COP
PUHY-EP YSLM-A(-BS)

► Specifications

Model			PUHY-EP1350YSLM-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	150.0
	*1	BTU / h	511,800
	Power input	kW	50.00
	Current input	A	84.4-80.1-77.2
	EER	kW / kW	3.00
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	168.0
	*2	BTU / h	573,200
	Power input	kW	54.36
	Current input	A	91.7-87.1-84.0
	COP	kW / kW	3.09
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity
	Model / Quantity		P15~P250/3~50
Sound pressure level (measured in anechoic room)		dB <A>	68
Sound power level (measured in anechoic room)		dB <A>	88
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed

Set Model

Model			PUHY-EP450YLM-A (-BS)	PUHY-EP450YLM-A (-BS)	PUHY-EP450YLM-A (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	370	370	370
		L/s	6,167	6,167	6,167
		cfm	13,065	13,065	13,065
	Driving mechanism		Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 2	0.92 x 2	0.92 x 2
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	12.4	12.4	12.4
	Case heater	kW	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD		mm	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740
		in.	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection	Over-current protection	Over-current protection
Refrigerant	Type x original charge		R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)
Net weight		kg (lbs)	318 (702)	318 (702)	318 (702)
Heat exchanger			Salt-resistant cross fin & aluminium tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

HIGH COP

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

HEAT SOURCE UNIT
WY (Heat Pump) Series
PQHY-P YHM-A

► Specifications

Model			PQHY-P200YHM-A	PQHY-P250YHM-A	PQHY-P300YHM-A
Power source			3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz
Cooling capacity (Nominal)	*1	kW	22.4	28.0	33.5
	*1	BTU / h	76,400	95,500	114,300
	Power input	kW	3.92	5.45	7.36
	Current input	A	6.6-6.2-6.0	9.2-8.7-8.4	12.4-11.8-11.3
	EER	kW / kW	5.71	5.13	4.55
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Heating capacity (Nominal)	*2	kW	25.0	31.5	37.5
	*2	BTU / h	85,300	107,500	128,000
	Power input	kW	4.12	5.80	8.15
	Current input	A	6.9-6.6-6.3	9.7-9.3-8.9	13.7-13.0-12.5
	COP	kW / kW	6.06	5.43	4.60
Temp. range of heating	Indoor	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Indoor unit connectable	Total capacity		50~130 % of heat source unit capacity	50~130 % of heat source unit capacity	50~130 % of heat source unit capacity
	Model / Quantity		P15~P250 / 1~17	P15~P250 / 1~21	P15~P250 / 1~26
Sound pressure level (measured in anechoic room)		dB <A>	47	49	50
Refrigerant piping diameter [O.D.]	Liquid pipe	mm (in.)	9.52(3/8) Brazed	9.52(3/8) Brazed (12.7(1/2) Brazed,total length >= 90m)	9.52(3/8) Brazed (12.7(1/2) Brazed,total length >= 40m)
	Gas pipe	mm (in.)	19.05(3/4) Brazed	22.2(7/8) Brazed	22.2(7/8) Brazed
Circulating water	Water flow rate	m^3 / h	5.76	5.76	5.76
		L/min	96	96	96
		cfm	3.4	3.4	3.4
	Pressure drop	kPa	17	17	17
	Operating volume range	m^3 / h	4.5 ~ 7.2	4.5 ~ 7.2	4.5 ~ 7.2
Compressor	Type x Quantity		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	4.6	6.3	7.4
	Case heater	kW	0.035(240 V)	0.035(240 V)	0.035(240 V)
External finish			Acrylic painted steel plate	Acrylic painted steel plate	Acrylic painted steel plate
External dimension HxWxD		mm	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550
		in.	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)
	Inverter circuit (COMP.)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection
Refrigerant	Type x original charge		R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)
Net weight		kg (lbs)	195(430)	195(430)	195(430)
Heat exchanger			plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0
Optional parts			Joint: CMY-Y102SS-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS-G2,CMY-Y102LS-G2 Header: CMY-Y104/108/1010-G

Notes:

*1,*2 Nominal conditions

	Indoor	Water temperature	Pipe length	Level difference
Cooling	27ºCD.B./19ºCW.B. (81ºFD.B./66ºFW.B.)	30ºC (86ºF)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºCD.B. (68ºFD.B.)	20ºC (68ºF)		

*3 The ambient temperature of the heat source unit needs to be kept below 40ºCD.B.
*4 The ambient relative humidity of the heat source unit needs to be kept below 80%.
*5 The heat source Unit should not be installed at outdoor.
*6 Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*7 Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

HEAT SOURCE UNIT
WY (Heat Pump) Series
PQHY-P YSHM-A

► Specifications

Model			PQHY-P400YSHM-A	PQHY-P450YSHM-A	PQHY-P500YSHM-A
Power source			3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz
Cooling capacity (Nominal)	*1	kW	45.0	50.0	56.0
	*1	BTU / h	153,500	170,600	191,100
	Power input	kW	8.25	9.84	11.45
	Current input	A	13.9-13.2-12.7	16.6-15.7-15.2	19.3-18.3-17.6
	EER	kW / kW	5.45	5.08	4.89
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Heating capacity (Nominal)	*2	kW	50.0	56.0	63.0
	*2	BTU / h	170,600	191,100	215,000
	Power input	kW	8.65	10.42	12.06
	Current input	A	14.6-13.8-13.3	17.5-16.7-16.1	20.3-19.3-18.6
	COP	kW / kW	5.78	5.37	5.22
Temp. range of heating	Indoor	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Indoor unit connectable	Total capacity		50~130 % of heat source unit capacity	50~130 % of heat source unit capacity	50~130 % of heat source unit capacity
	Model / Quantity		P15~P250 / 1~34	P15~P250 / 1~39	P15~P250 / 1~43
Sound pressure level (measured in anechoic room)		dB <A>	50	51	52
Refrigerant piping diameter [O.D.]	Liquid pipe	mm (in.)	12.7(1/2) Brazed	15.88(5/8) Brazed	15.88(5/8) Brazed
	Gas pipe	mm (in.)	28.58(1-1/8) Brazed	28.58(1-1/8) Brazed	28.58(1-1/8) Brazed

Set Model

Model			PQHY-P200YHM-A	PQHY-P200YHM-A	PQHY-P250YHM-A	PQHY-P200YHM-A	PQHY-P250YHM-A	PQHY-P250YHM-A
Circulating water	Water flow rate	m^3 / h	5.76 + 5.76		5.76 + 5.76		5.76 + 5.76	
		L/min	96 + 96		96 + 96		96 + 96	
		cfm	3.4 + 3.4		3.4 + 3.4		3.4 + 3.4	
	Pressure drop	kPa	17	17	17	17	17	17
	Operating volume range	m^3 / h	4.5 + 4.5 ~ 7.2 + 7.2		4.5 + 4.5 ~ 7.2 + 7.2		4.5 + 4.5 ~ 7.2 + 7.2	
Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	4.6	4.6	6.3	4.6	6.3	6.3
	Case heater	kW	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)
External finish			Acrylic painted steel plate		Acrylic painted steel plate		Acrylic painted steel plate	
External dimension HxWxD		mm	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550
		in.	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Inverter circuit (COMP.)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection		Over-heat protection		Over-heat protection	
Refrigerant	Type x original charge		R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)
Net weight		kg (lbs)	195(430)	195(430)	195(430)	195(430)	195(430)	195(430)
Heat exchanger			plate type	plate type	plate type	plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0	2.0	2.0	2.0
Optional parts			Heat Source Twinning kit: CMY-Y100VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header:CMY-Y104/108/1010-G		Heat Source Twinning kit: CMY-Y100VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header:CMY-Y104/108/1010-G		Heat Source Twinning kit: CMY-Y100VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header:CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions

	Indoor	Water temperature	Pipe length	Level difference
Cooling	27ºCD.B./19ºCW.B. (81ºFD.B./66ºFW.B.)	30ºC (86ºF)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºCD.B. (68ºFD.B.)	20ºC (68ºF)		

*3 The ambient temperature of the heat source unit needs to be kept below 40ºCD.B.
*4 The ambient relative humidity of the heat source unit needs to be kept below 80%.
*5 The heat source Unit should not be installed at outdoor.
*6 Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*7 Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

HEAT SOURCE UNIT
WY (Heat Pump) Series
PQHY-P YSHM-A

► Specifications

Model			PQHY-P550YSHM-A	PQHY-P600YSHM-A
Power source			3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz
Cooling capacity (Nominal)	*1	kW	63.0	69.0
	*1	BTU / h	215,000	235,400
	Power input	kW	13.46	15.48
	Current input	A	22.7-21.5-20.8	26.1-24.8-23.9
	EER	kW / kW	4.68	4.45
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Heating capacity (Nominal)	*2	kW	69.0	76.5
	*2	BTU / h	235,400	261,000
	Power input	kW	14.65	17.12
	Current input	A	24.7-23.4-22.6	28.9-27.4-26.4
	COP	kW / kW	4.70	4.46
Temp. range of heating	Indoor	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Indoor unit connectable	Total capacity		50~130 % of heat source unit capacity	50~130 % of heat source unit capacity
	Model / Quantity		P15~P250 / 2~47	P15~P250 / 2~50
Sound pressure level (measured in anechoic room)		dB <A>	52.5	53
Refrigerant piping diameter [O.D.]	Liquid pipe	mm (in.)	15.88(5/8) Brazed	15.88(5/8) Brazed
	Gas pipe	mm (in.)	28.58(1-1/8) Brazed	28.58(1-1/8) Brazed

Set Model

Model			PQHY-P300YHM-A	PQHY-P250YHM-A	PQHY-P300YHM-A	PQHY-P300YHM-A
Circulating water	Water flow rate	m^3 / h	5.76 + 5.76		5.76 + 5.76	
		L/min	96 + 96		96 + 96	
		cfm	3.4 + 3.4		3.4 + 3.4	
	Pressure drop	kPa	17	17	17	17
	Operating volume range	m^3 / h	4.5 + 4.5 ~ 7.2 + 7.2		4.5 + 4.5 ~ 7.2 + 7.2	
Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	7.4	6.3	7.4	7.4
	Case heater	kW	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)
External finish			Acrylic painted steel plate	Acrylic painted steel plate	Acrylic painted steel plate	Acrylic painted steel plate
External dimension HxWxD		mm	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550
		in.	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Inverter circuit (COMP.)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection		Over-heat protection	
Refrigerant	Type x original charge		R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)
Net weight		kg (lbs)	195(430)	195(430)	195(430)	195(430)
Heat exchanger			plate type	plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0	2.0
Optional parts			Heat Source Twinning kit: CMY-Y100VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2,CMY-Y302S-G2 Header:CMY-Y104/108/1010-G		Heat Source Twinning kit: CMY-Y100VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2,CMY-Y302S-G2 Header:CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions

	Indoor	Water temperature	Pipe length	Level difference
Cooling	27°CD.B./19°CW.B. (81°FD.B./66°FW.B.)	30°C (86°F)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°CD.B. (68°FD.B.)	20°C (68°F)		

*3 The ambient temperature of the heat source unit needs to be kept below 40°CD.B.
*4 The ambient relative humidity of the heat source unit needs to be kept below 80%.
*5 The heat source Unit should not be installed at outdoor.
*6 Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*7 Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

HEAT SOURCE UNIT
WY (Heat Pump) Series
PQHY-P YSHM-A

► Specifications

Model			PQHY-P650YSHM-A	PQHY-P700YSHM-A
Power source			3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz
Cooling capacity (Nominal)	*1	kW	73.0	80.0
	*1	BTU / h	249,100	273,000
	Power input	kW	13.96	15.58
	Current input	A	23.5-22.3-21.5	26.3-24.9-24.0
	EER	kW / kW	5.22	5.13
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Heating capacity (Nominal)	*2	kW	81.5	88.0
	*2	BTU / h	278,100	300,300
	Power input	kW	14.74	16.51
	Current input	A	24.8-23.6-22.7	27.8-26.4-25.5
	COP	kW / kW	5.52	5.33
Temp. range of heating	Indoor	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Indoor unit connectable	Total capacity		50~130 % of heat source unit capacity	50~130 % of heat source unit capacity
	Model / Quantity		P15~P250 / 2~50	P15~P250 / 2~50
Sound pressure level (measured in anechoic room)		dB <A>	53	53.5
Refrigerant piping diameter [O.D.]	Liquid pipe	mm (in.)	19.05(3/4) Brazed	19.05(3/4) Brazed
	Gas pipe	mm (in.)	34.93(1-3/8) Brazed	34.93(1-3/8) Brazed

Set Model

Model			PQHY-P250YHM-A	PQHY-P200YHM-A	PQHY-P200YHM-A	PQHY-P250YHM-A	PQHY-P250YHM-A	PQHY-P200YHM-A
Circulating water	Water flow rate	m^3 / h	5.76 + 5.76 + 5.76			5.76 + 5.76 + 5.76		
		L/min	96 + 96 + 96			96 + 96 + 96		
		cfm	3.4 + 3.4 + 3.4			3.4 + 3.4 + 3.4		
	Pressure drop	kPa	17	17	17	17	17	17
	Operating volume range	m^3 / h	4.5 + 4.5 + 4.5 ~ 7.2 + 7.2 + 7.2			4.5 + 4.5 + 4.5 ~ 7.2 + 7.2 + 7.2		
Compressor	Type x Quantity		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	6.3	4.6	4.6	6.3	6.3	4.6
	Case heater	kW	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)
External finish			Acrylic painted steel plate			Acrylic painted steel plate		
External dimension HxWxD		mm	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550
		in.	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)			High pressure sensor, High pressure switch at 4.15MPa (601 psi)		
	Inverter circuit (COMP.)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		Over-heat protection			Over-heat protection		
Refrigerant	Type x original charge		R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)
Net weight		kg (lbs)	195(430)	195(430)	195(430)	195(430)	195(430)	195(430)
Heat exchanger			plate type	plate type	plate type	plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0	2.0	2.0	2.0
Optional parts			Heat Source Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-Y202S-G2,CMY-Y302S-G2 Header: CMY-Y104/108/1010-G			Heat Source Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-Y202S-G2,CMY-Y302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2 Nominal conditions

	Indoor	Water temperature	Pipe length	Level difference
Cooling	27ºCD.B./19ºCW.B. (81ºFD.B./66ºFW.B.)	30ºC (86ºF)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºCD.B. (68ºFD.B.)	20ºC (68ºF)		

*3 The ambient temperature of the heat source unit needs to be kept below 40ºCD.B.
*4 The ambient relative humidity of the heat source unit needs to be kept below 80%.
*5 The heat source Unit should not be installed at outdoor.
*6 Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*7 Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

HEAT SOURCE UNIT
WY (Heat Pump) Series
PQHY-P YSHM-A

► Specifications

Model			PQHY-P750YSHM-A	PQHY-P800YSHM-A
Power source			3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz
Cooling capacity (Nominal)	*1	kW	85.0	90.0
	*1	BTU / h	290,000	307,100
	Power input	kW	17.19	19.18
	Current input	A	29.0-27.5-26.5	32.3-30.7-29.6
	EER	kW / kW	4.94	4.69
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Heating capacity (Nominal)	*2	kW	95.0	100.0
	*2	BTU / h	324,100	341,200
	Power input	kW	18.27	20.74
	Current input	A	30.8-29.3-28.2	35.0-33.2-32.0
	COP	kW / kW	5.19	4.82
Temp. range of heating	Indoor	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Indoor unit connectable	Total capacity		50~130 % of heat source unit capacity	50~130 % of heat source unit capacity
	Model / Quantity		P15~P250 / 2~50	P15~P250 / 2~50
Sound pressure level (measured in anechoic room)		dB <A>	54	54
Refrigerant piping diameter [O.D.]	Liquid pipe	mm (in.)	19.05(3/4) Brazed	19.05(3/4) Brazed
	Gas pipe	mm (in.)	34.93(1-3/8) Brazed	34.93(1-3/8) Brazed

Set Model

Model			PQHY-P250YHM-A	PQHY-P250YHM-A	PQHY-P250YHM-A	PQHY-P300YHM-A	PQHY-P250YHM-A	PQHY-P250YHM-A
Circulating water	Water flow rate	m^3 / h	5.76 + 5.76 + 5.76			5.76 + 5.76 + 5.76		
		L/min	96 + 96 + 96			96 + 96 + 96		
		cfm	3.4 + 3.4 + 3.4			3.4 + 3.4 + 3.4		
	Pressure drop	kPa	17	17	17	17	17	17
	Operating volume range	m^3 / h	4.5 + 4.5 + 4.5 ~ 7.2 + 7.2 + 7.2			4.5 + 4.5 + 4.5 ~ 7.2 + 7.2 + 7.2		
Compressor	Type x Quantity		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	6.3	6.3	6.3	7.4	6.3	6.3
	Case heater	kW	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)
External finish			Acrylic painted steel plate			Acrylic painted steel plate		
External dimension HxWxD		mm	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550
		in.	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)			High pressure sensor, High pressure switch at 4.15MPa (601 psi)		
	Inverter circuit (COMP.)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		Over-heat protection			Over-heat protection		
Refrigerant	Type x original charge		R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)
Net weight		kg (lbs)	195(430)	195(430)	195(430)	195(430)	195(430)	195(430)
Heat exchanger			plate type	plate type	plate type	plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0	2.0	2.0	2.0
Optional parts			Heat Source Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-Y202S-G2,CMY-Y302S-G2 Header: CMY-Y104/108/1010-G			Heat Source Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-Y202S-G2,CMY-Y302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2 Nominal conditions

	Indoor	Water temperature	Pipe length	Level difference
Cooling	27ºCD.B./19ºCW.B. (81ºFD.B./66ºFW.B.)	30ºC (86ºF)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºCD.B. (68ºFD.B.)	20ºC (68ºF)		

*3 The ambient temperature of the heat source unit needs to be kept below 40ºCD.B.
*4 The ambient relative humidity of the heat source unit needs to be kept below 80%.
*5 The heat source Unit should not be installed at outdoor.
*6 Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*7 Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

HEAT SOURCE UNIT
WY (Heat Pump) Series
PQHY-P YSHM-A

► Specifications

Model			PQHY-P850YSHM-A	PQHY-P900YSHM-A
Power source			3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz
Cooling capacity (Nominal)	*1	kW	96.0	101.0
	*1	BTU / h	327,600	344,600
	Power input	kW	21.20	23.22
	Current input	A	35.7-33.9-32.7	39.1-37.2-35.8
	EER	kW / kW	4.52	4.34
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Heating capacity (Nominal)	*2	kW	108.0	113.0
	*2	BTU / h	368,500	385,600
	Power input	kW	23.21	25.67
	Current input	A	39.1-37.2-35.8	43.3-41.1-39.6
	COP	kW / kW	4.65	4.40
Temp. range of heating	Indoor	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Indoor unit connectable	Total capacity		50~130 % of heat source unit capacity	50~130 % of heat source unit capacity
	Model / Quantity		P15~P250 / 2~50	P15~P250 / 2~50
Sound pressure level (measured in anechoic room)		dB <A>	54.5	55
Refrigerant piping diameter [O.D.]	Liquid pipe	mm (in.)	19.05(3/4) Brazed	19.05(3/4) Brazed
	Gas pipe	mm (in.)	41.28(1-5/8) Brazed	41.28(1-5/8) Brazed

Set Model

Model			PQHY-P300YHM-A	PQHY-P300YHM-A	PQHY-P250YHM-A	PQHY-P300YHM-A	PQHY-P300YHM-A	PQHY-P300YHM-A
Circulating water	Water flow rate	m^3 / h	5.76 + 5.76 + 5.76			5.76 + 5.76 + 5.76		
		L/min	96 + 96 + 96			96 + 96 + 96		
		cfm	3.4 + 3.4 + 3.4			3.4 + 3.4 + 3.4		
	Pressure drop	kPa	17	17	17	17	17	17
	Operating volume range	m^3 / h	4.5 + 4.5 + 4.5 ~ 7.2 + 7.2 + 7.2			4.5 + 4.5 + 4.5 ~ 7.2 + 7.2 + 7.2		
Compressor	Type x Quantity		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	7.4	7.4	6.3	7.4	7.4	7.4
	Case heater	kW	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)
External finish			Acrylic painted steel plate			Acrylic painted steel plate		
External dimension HxWxD		mm	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550
		in.	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)			High pressure sensor, High pressure switch at 4.15MPa (601 psi)		
	Inverter circuit (COMP.)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		Over-heat protection			Over-heat protection		
Refrigerant	Type x original charge		R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)
Net weight		kg (lbs)	195(430)	195(430)	195(430)	195(430)	195(430)	195(430)
Heat exchanger			plate type	plate type	plate type	plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0	2.0	2.0	2.0
Optional parts			Heat Source Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-Y202S-G2,CMY-Y302S-G2 Header: CMY-Y104/108/1010-G			Heat Source Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-Y202S-G2,CMY-Y302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2 Nominal conditions

	Indoor	Water temperature	Pipe length	Level difference
Cooling	27ºCD.B./19ºCW.B. (81ºFD.B./66ºFW.B.)	30ºC (86ºF)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºCD.B. (68ºFD.B.)	20ºC (68ºF)		

*3 The ambient temperature of the heat source unit needs to be kept below 40ºCD.B.
*4 The ambient relative humidity of the heat source unit needs to be kept below 80%.
*5 The heat source Unit should not be installed at outdoor.
*6 Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*7 Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
ZUBADAN (Heat Pump) Series(Y)
PUHY-HP Y(S)HM-A(-BS)

▸Specifications

Set name			PUHY-HP200YHM-A(-BS)	PUHY-HP250YHM-A(-BS)	PUHY-HP400YSHM-A(-BS)		PUHY-HP500YSHM-A(-BS)	
Power source			3-phase 4-wire 380-400-415V 50/60Hz					
Cooling capacity (Nominal)	*1	kW	22.4	28.0	45.0		56.0	
	*1	BTU/h	76,400	95,500	153,500		191,100	
	Power input	kW	6.40	9.06	12.86		18.16	
	Current input	A	10.8-10.2-9.8	15.2-14.5-14.0	21.7-20.6-19.8		30.6-29.1-28.0	
	COP	kW/kW	3.50	3.09	3.49		3.08	
Temp. range of cooling	Indoor	W.B.	15 ~ 24°C (59 ~ 75°F)					
	Outdoor	D.B.	- 5 ~ 43°C (23 ~ 109°F)					
Heating capacity (Nominal)	*2	kW	25.0	31.5	50.0		63.0	
	*2	BTU/h	85,300	107,500	170,600		215,000	
	Power input	kW	6.52	8.94	13.35		18.04	
	Current input	A	11.0-10.4-10.0	15.0-14.3-13.8	22.5-21.4-20.6		30.4-28.9-27.8	
	COP	kW/kW	3.83	3.52	3.74		3.49	
Temp. range of heating	Indoor	D.B.	15 ~ 27°C (59 ~ 81°F)					
	Outdoor	W.B.	-25 ~ 15.5°C (-13 ~ 60°F)					
Indoor unit connectable	Total capacity		50 ~ 130% of outdoor unit capacity					
	Model/Quantity		P15~P250 / 1~17	P15 ~ P250 / 1 ~ 21	P15 ~ P250 / 1 ~ 34		P15 ~ P250 / 1 ~ 43	
Sound pressure level (measured in anechoic room)		dB<A>	56	57	59		60	
Diameter of refrigerant pipe	Liquid pipe	mm(in.)	ø12.7 (ø1/2) Brazed	ø12.7 (ø1/2) Brazed	ø15.88 (ø5/8) Brazed		ø15.88 (ø5/8) Brazed	
	Gas pipe	mm(in.)	ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed	ø28.58 (ø1-1/8) Brazed		ø28.58 (ø1-1/8) Brazed	
Model			-		PUHY-HP200YHM-A(-BS)	PUHY-HP200YHM-A(-BS)	PUHY-HP250YHM-A(-BS)	PUHY-HP250YHM-A(-BS)
External finish			Pre-coated galvanized steel sheets <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets <MUNSELL 5Y 8/1 or similar>			
External dimension H x W x D		mm	1,710 (without legs 1,650) x 920 x 760	1,710 (without legs 1,650) x 920 x 760	1,710 (without legs 1,650) x 920 x 760	1,710 (without legs 1,650) x 920 x 760	1,710 (without legs 1,650) x 920 x 760	1,710 (without legs 1,650) x 920 x 760
		in.	67-3/8 (without legs 65) x 36-1/4 x 29-15/16	67-3/8 (without legs 65) x 36-1/4 x 29-15/16	67-3/8 (without legs 65) x 36-1/4 x 29-15/16	67-3/8 (without legs 65) x 36-1/4 x 29-15/16	67-3/8 (without legs 65) x 36-1/4 x 29-15/16	67-3/8 (without legs 65) x 36-1/4 x 29-15/16
Net weight		kg(lbs)	220 (486)	220 (486)	220 (486)	220 (486)	220 (486)	220 (486)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube			
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor			
	Starting method		Inverter		Inverter			
	Motor output	kW	5.3	6.7	5.3	5.3	6.7	6.7
FAN	*3 Air flow rate	m^3/min	225	225	225	225	225	225
		L/s	3,750	3,750	3,750	3,750	3,750	3,750
		cfm	7,945	7,945	7,945	7,945	7,945	7,945
	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection			
	Compressor		Over-heat protection		Over-heat protection			
Refrigerant	Type x Original charge		R410A x 9.0kg (20 lbs)	R410A x 9.0kg (20 lbs)	R410A x 9.0kg (20 lbs)	R410A x 9.0kg (20 lbs)	R410A x 9.0kg (20 lbs)	R410A x 9.0kg (20 lbs)
Pipe between unit distributor	Liquid pipe	mm(in.)	-	-	ø9.52 (ø3/8) Flare	ø9.52 (ø3/8) Flare	ø9.52 (ø3/8) Flare	ø9.52 (ø3/8) Flare
	Gas pipe	mm(in.)	-	-	ø19.05 (ø3/4) Brazed	ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed	ø22.2 (ø7/8) Brazed
Optional parts			Joint : CMY-Y102SS-G2 Header : CMY-Y104/108/1010-G		Outdoor Twinning kit : CMY-Y100VBK2 Joint : CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header : CMY-Y104/108/1010-G			

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
R2 Series
PURY-P YLM-A(-BS)

► Specifications

Model			PURY-P200YLM-A (-BS)	PURY-P250YLM-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	22.4	28.0
	*1	BTU / h	76,400	95,500
	Power input	kW	5.95	7.93
	Current input	A	10.0-9.5-9.1	13.3-12.7-12.2
	EER	kW / kW	3.76	3.53
Temp. range of cooling *3	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)
Heating capacity (Nominal)	*2	kW	25.0	31.5
	*2	BTU / h	85,300	107,500
	Power input	kW	6.54	8.65
	Current input	A	11.0-10.4-10.1	14.6-13.8-13.3
	COP	kW / kW	3.82	3.64
Temp. range of heating *3	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150%	50~150% of outdoor unit capacity
	Model / Quantity		P15~P250/1~20	P15~P250/1~25
Sound pressure level (measured in anechoic room)		dB <A>	59	60
Sound power level (measured in anechoic room)		dB <A>	82.5	83.5
Refrigerant piping diameter	High pressure	mm (in.)	15.88 (5/8) Brazed	19.05 (3/4) Brazed
	Low pressure	mm (in.)	19.05 (3/4) Brazed	22.2 (7/8) Brazed
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	185	185
		L/s	3,083	3,083
		cfm	6,532	6,532
	Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 1	0.92 x 1
*4	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter
	Motor output	kW	5.6	6.9
	Case heater	kW	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>
External dimension HxWxD		mm	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740
		in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		Over-heat protection	Over-heat protection
	Fan motor		Over-current protection	Over-current protection
Refrigerant	Type x original charge		R410A x 9.5 kg (21 lbs)	R410A x 9.5 kg (21 lbs)
Net weight		kg (lbs)	205 (452)	205 (452)
Heat exchanger			Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube
Optional parts			Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 BC controller: CMB-P104,105,106,108,1010,1013,1016V-G1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1	Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 BC controller: CMB-P104,105,106,108,1010,1013,1016V-G1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.
*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
R2 Series
PURY-P YLM-A(-BS)

► Specifications

Model			PURY-P300YLM-A (-BS)	PURY-P350YLM-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	33.5	40.0
	*1	BTU / h	114,300	136,500
	Power input	kW	9.82	12.69
	Current input	A	16.5-15.7-15.1	21.4-20.3-19.6
	EER	kW / kW	3.41	3.15
Temp. range of cooling *3	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)
Heating capacity (Nominal)	*2	kW	37.5	45.0
	*2	BTU / h	128,000	153,500
	Power input	kW	10.77	12.97
	Current input	A	18.1-17.2-16.6	21.8-20.8-20.0
	COP	kW / kW	3.48	3.46
Temp. range of heating *3	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P15~P250/1~30	P15~P250/1~35
Sound pressure level (measured in anechoic room)		dB <A>	62.5	62.5
Sound power level (measured in anechoic room)		dB <A>	86	86
Refrigerant piping diameter	High pressure	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Low pressure	mm (in.)	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	230	230
		L/s	3,833	3,833
		cfm	8,121	8,121
	Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 1	0.92 x 1
*4	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter
	Motor output	kW	8.1	10.5
	Case heater	kW	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>
External dimension HxWxD		mm	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740
		in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		Over-heat protection	Over-heat protection
	Fan motor		Over-current protection	Over-current protection
Refrigerant	Type x original charge		R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)
Net weight		kg (lbs)	248 (547)	248 (547)
Heat exchanger			Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube
Optional parts			Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 BC controller: CMB-P104,105,106,108,1010,1013,1016V-G1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1	Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 BC controller: CMB-P104,105,106,108,1010,1013,1016V-G1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 -5ºC DB (23ºF DB) / -6ºC WB (21ºF WB) to 21ºC DB (70ºF DB) / 15.5ºC WB (60ºF WB) with cooling/heating mixed operation.
*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
R2 Series
PURY-P YSLM-A(-BS)

► Specifications

Model			PURY-P400YSLM-A (-BS)	PURY-P450YSLM-A (-BS)	PURY-P500YSLM-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	45.0	50.0	56.0
	*1	BTU / h	153,500	170,600	191,100
	Power input	kW	12.36	14.16	16.37
	Current input	A	20.8-19.8-19.1	23.9-22.7-21.8	27.6-26.2-25.3
	EER	kW / kW	3.64	3.53	3.42
Temp. range of cooling *3	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)
Heating capacity (Nominal)	*2	kW	50.0	56.0	63.0
	*2	BTU / h	170,600	191,100	215,000
	Power input	kW	13.08	15.01	17.30
	Current input	A	22.0-20.9-20.2	25.3-24.0-23.2	29.2-27.7-26.7
	COP	kW / kW	3.82	3.73	3.64
Temp. range of heating *3	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P15~P250/1~40	P15~P250/1~45	P15~P250/1~50
Sound pressure level (measured in anechoic room)		dB <A>	62	62.5	63
Sound power level (measured in anechoic room)		dB <A>	85.5	86	86.5
Refrigerant piping diameter	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model

Model			PURY-P200YLM-A (-BS)	PURY-P200YLM-A (-BS)	PURY-P200YLM-A (-BS)	PURY-P250YLM-A (-BS)	PURY-P250YLM-A (-BS)	PURY-P250YLM-A (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	185	185	185	185	185	185
		L/s	3,083	3,083	3,083	3,083	3,083	3,083
		cfm	6,532	6,532	6,532	6,532	6,532	6,532
	Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*4	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.6	5.6	5.6	6.9	6.9	6.9
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740
		in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection		Over-current protection		Over-current protection	
Refrigerant	Type x original charge		R410A x 9.5 kg (21 lbs)	R410A x 9.5 kg (21 lbs)	R410A x 9.5 kg (21 lbs)	R410A x 9.5 kg (21 lbs)	R410A x 9.5 kg (21 lbs)	R410A x 9.5 kg (21 lbs)
Net weight		kg (lbs)	205 (452)	205 (452)	205 (452)	205 (452)	205 (452)	205 (452)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	High pressure	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Low pressure	mm (in.)	19.05 (3/4) Brazed	–	19.05 (3/4) Brazed	–	22.2 (7/8) Brazed	–
Optional parts			Outdoor Twinning kit: CMY-R100VBK-A Joint: CMY-Y102S-G2,CMY-Y102L-G2,CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1		Outdoor Twinning kit: CMY-R100VBK-A Joint: CMY-Y102S-G2,CMY-Y102L-G2,CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1		Outdoor Twinning kit: CMY-R100VBK-A Joint: CMY-Y102S-G2,CMY-Y102L-G2,CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1	

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.

*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).

*Nominal condition *1,*2 are subject to JIS B8615-1.

*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
R2 Series
PURY-P YSLM-A(-BS)

► Specifications

Model			PURY-P550YSLM-A (-BS)	PURY-P600YSLM-A (-BS)	PURY-P650YSLM-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	63.0	69.0	73.0
	*1	BTU / h	215,000	235,400	249,100
	Power input	kW	18.75	20.90	22.95
	Current input	A	31.6-30.0-28.9	35.2-33.5-32.3	38.7-36.8-35.4
	EER	kW / kW	3.36	3.30	3.18
Temp. range of cooling *3	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)
Heating capacity (Nominal)	*2	kW	69.0	76.5	81.5
	*2	BTU / h	235,400	261,000	278,100
	Power input	kW	19.38	21.98	23.48
	Current input	A	32.7-31.0-29.9	37.1-35.2-33.9	39.6-37.6-36.2
	COP	kW / kW	3.56	3.48	3.47
Temp. range of heating *3	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P15~P250/2~50	P15~P250/2~50	P15~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	64.5	65.5	65.5
Sound power level (measured in anechoic room)		dB <A>	88	89	89
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model

Model			PURY-P250YLM-A (-BS)	PURY-P300YLM-A (-BS)	PURY-P300YLM-A (-BS)	PURY-P300YLM-A (-BS)	PURY-P300YLM-A (-BS)	PURY-P350YLM-A (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	185	230	230	230	230	230
		L/s	3,083	3,833	3,833	3,833	3,833	3,833
		cfm	6,532	8,121	8,121	8,121	8,121	8,121
	Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*4	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	6.9	8.1	8.1	8.1	8.1	10.5
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740
		in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection		Over-current protection		Over-current protection	
Refrigerant	Type x original charge		R410A x 9.5 kg (21 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)
Net weight		kg (lbs)	205 (452)	248 (547)	248 (547)	248 (547)	248 (547)	248 (547)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	High pressure	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Low pressure	mm (in.)	22.2 (7/8) Brazed	–	22.2 (7/8) Brazed	–	22.2 (7/8) Brazed	–
Optional parts			Outdoor Twinning kit: CMY-R100VBK2 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1		Outdoor Twinning kit: CMY-R100VBK2 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1		Outdoor Twinning kit: CMY-R100VBK2 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1	

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 -5ºC DB (23ºF DB) / -6ºC WB (21ºF WB) to 21ºC DB (70ºF DB) / 15.5ºC WB (60ºF WB) with cooling/heating mixed operation.

*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).

*Nominal condition *1,*2 are subject to JIS B8615-1.

*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
R2 Series
PURY-P YSLM-A(-BS)

► Specifications

Model			PURY-P700YSLM-A (-BS)	PURY-P750YSLM-A (-BS)	PURY-P800YSLM-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	80.0	85.0	90.0
	*1	BTU / h	273,000	290,000	307,100
	Power input	kW	26.22	28.23	30.30
	Current input	A	44.2-42.0-40.5	47.6-45.2-43.6	51.1-48.5-46.8
	EER	kW / kW	3.05	3.01	2.97
Temp. range of cooling *3	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)
Heating capacity (Nominal)	*2	kW	88.0	90.0	90.0
	*2	BTU / h	300,300	307,100	307,100
	Power input	kW	25.43	25.49	24.93
	Current input	A	42.9-40.7-39.3	43.0-40.8-39.4	42.0-39.9-38.5
	COP	kW / kW	3.46	3.53	3.61
Temp. range of heating *3	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P15~P250/2~50	P15~P250/2~50	P15~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	65.5	65.5	65.5
Sound power level (measured in anechoic room)		dB <A>	89	89	89
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	34.93 (1-3/8) Brazed	34.93 (1-3/8) Brazed	34.93 (1-3/8) Brazed

Set Model

Model			PURY-P350YLM-A (-BS)	PURY-P350YLM-A (-BS)	PURY-P350YLM-A (-BS)	PURY-P400YLM-A (-BS)	PURY-P400YLM-A (-BS)	PURY-P400YLM-A (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	230	230	230	230	230	230
		L/s	3,833	3,833	3,833	3,833	3,833	3,833
		cfm	8,121	8,121	8,121	8,121	8,121	8,121
	Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*4	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.5	10.5	10.5	10.9	10.9	10.9
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740
		in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection		Over-current protection		Over-current protection	
Refrigerant	Type x original charge		R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)
Net weight		kg (lbs)	248 (547)	248 (547)	248 (547)	246 (543)	246 (543)	246 (543)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	High pressure	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	–	28.58 (1-1/8) Brazed	–	28.58 (1-1/8) Brazed	–
Optional parts			Outdoor Twinning kit: CMY-R200VBK2 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P1016V-HA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1		Outdoor Twinning kit: CMY-R200VBK2 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P1016V-HA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1		Outdoor Twinning kit: CMY-R200VBK2 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P1016V-HA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1	

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.

*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).

*Nominal condition *1,*2 are subject to JIS B8615-1.

*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
R2 Series
PURY-P YSLM-A(-BS)

► Specifications

Model			PURY-P850YSLM-A (-BS)	PURY-P900YSLM-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	96.0	101.0
	*1	BTU / h	327,600	344,600
	Power input	kW	31.16	31.56
	Current input	A	52.6-49.9-48.1	53.2-50.6-48.7
	EER	kW / kW	3.08	3.20
Temp. range of cooling *3	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)
Heating capacity (Nominal)	*2	kW	101.0	113.0
	*2	BTU / h	344,600	385,600
	Power input	kW	28.53	32.47
	Current input	A	48.1-45.7-44.1	54.8-52.0-50.1
	COP	kW / kW	3.54	3.48
Temp. range of heating *3	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P15~P250/2~50	P15~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	65.5	65.5
Sound power level (measured in anechoic room)		dB <A>	89	89
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model

Model			PURY-P400YLM-A (-BS)	PURY-P450YLM-A (-BS)	PURY-P450YLM-A (-BS)	PURY-P450YLM-A (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	230	320	320	320
		L/s	3,833	5,333	5,333	5,333
		cfm	8,121	11,299	11,299	11,299
	Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 2	0.92 x 2	0.92 x 2
*4	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.9	12.4	12.4	12.4
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740
		in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection	Over-current protection	Over-current protection	Over-current protection
Refrigerant	Type x original charge		R410A x 10.3 kg (23 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)
Net weight		kg (lbs)	246 (543)	321 (708)	321 (708)	321 (708)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	–	28.58 (1-1/8) Brazed	–
Optional parts			Outdoor Twinning kit: CMY-R200XLVBK Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P1016V-HA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1		Outdoor Twinning kit: CMY-R200XLVBK Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P1016V-HA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1	

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.
*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
R2 Series - High COP
PURY-EP YLM-A(-BS)

► Specifications

Model			PURY-EP200YLM-A (-BS)	PURY-EP250YLM-A (-BS)	PURY-EP300YLM-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	22.4	28.0	33.5
	*1	BTU / h	76,400	95,500	114,300
	Power input	kW	5.48	7.25	9.20
	Current input	A	9.2-8.7-8.4	12.2-11.6-11.2	15.5-14.7-14.2
	EER	kW / kW	4.08	3.86	3.64
Temp. range of cooling *3	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)
Heating capacity (Nominal)	*2	kW	25.0	31.5	37.5
	*2	BTU / h	85,300	107,500	128,000
	Power input	kW	6.41	8.45	9.97
	Current input	A	10.8-10.2-9.9	14.2-13.5-13.0	16.8-15.9-15.4
	COP	kW / kW	3.90	3.72	3.76
Temp. range of heating *3	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150%	50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P15~P250/1~20	P15~P250/1~25	P15~P250/1~30
Sound pressure level (measured in anechoic room)		dB <A>	59	60	62.5
Sound power level (measured in anechoic room)		dB <A>	82.5	83.5	86
Refrigerant piping diameter	High pressure	mm (in.)	15.88 (5/8) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Low pressure	mm (in.)	19.05 (3/4) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	185	185	230
		L/s	3,083	3,083	3,833
		cfm	6,532	6,532	8,121
	Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1
*4	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	5.6	6.9	8.1
	Case heater	kW	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>
External dimension HxWxD		mm	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 1,220 x 740
		in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection	Over-current protection	Over-current protection
Refrigerant	Type x original charge		R410A x 8.5 kg (19 lbs)	R410A x 8.5 kg (19 lbs)	R410A x 9.3 kg (21 lbs)
Net weight		kg (lbs)	218 (481)	218 (481)	260 (574)
Heat exchanger			Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube
Optional parts			Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 BC controller: CMB-P104,105,106,108,1010,1013,1016V-G1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1	Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 BC controller: CMB-P104,105,106,108,1010,1013,1016V-G1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1	Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 BC controller: CMB-P104,105,106,108,1010,1013,1016V-G1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1

HIGH COP

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.
*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
R2 Series - High COP
PURY-EP YLM-A(-BS)

► Specifications

Model			PURY-EP350YLM-A (-BS)	PURY-EP400YLM-A (-BS)	PURY-EP450YLM-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	40.0	45.0	50.0
	*1	BTU / h	136,500	153,500	170,600
	Power input	kW	12.57	12.56	14.83
	Current input	A	21.2-20.1-19.4	21.2-20.1-19.4	25.0-23.7-22.9
	EER	kW / kW	3.18	3.58	3.37
Temp. range of cooling *3	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)
Heating capacity (Nominal)	*2	kW	45.0	50.0	56.0
	*2	BTU / h	153,500	170,600	191,100
	Power input	kW	12.93	13.40	15.86
	Current input	A	21.8-20.7-19.9	22.6-21.4-20.7	26.7-25.4-24.5
	COP	kW / kW	3.48	3.73	3.53
Temp. range of heating *3	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P15~P250/1~35	P15~P250/1~40	P15~P250/1~45
Sound pressure level (measured in anechoic room)		dB <A>	62.5	62.5	62.5
Sound power level (measured in anechoic room)		dB <A>	86	86	86
Refrigerant piping diameter	High pressure	mm (in.)	19.05 (3/4) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	230	320	320
		L/s	3,833	5,333	5,333
		cfm	8,121	11,299	11,299
	Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 1	0.92 x 2	0.92 x 2
*4	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	10.5	10.9	12.4
	Case heater	kW	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>
External dimension HxWxD		mm	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740
		in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection	Over-current protection	Over-current protection
Refrigerant	Type x original charge		R410A x 9.3 kg (21 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)
Net weight		kg (lbs)	260 (574)	338 (746)	338 (746)
Heat exchanger			Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube
Optional parts			Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 BC controller: CMB-P104,105,106,108,1010,1013,1016V-G1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1	Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1	Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1

HIGH COP

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.
*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
R2 Series - High COP
PURY-EP YSLM-A(-BS)

► Specifications

Model			PURY-EP500YSLM-A (-BS)	PURY-EP550YSLM-A (-BS)	PURY-EP600YSLM-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	56.0	63.0	69.0
	*1	BTU / h	191,100	215,000	235,400
	Power input	kW	14.97	17.35	19.54
	Current input	A	25.2-24.0-23.1	29.2-27.8-26.8	32.9-31.3-30.2
	EER	kW / kW	3.74	3.63	3.53
Temp. range of cooling *3	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)
Heating capacity (Nominal)	*2	kW	63.0	69.0	76.5
	*2	BTU / h	215,000	235,400	261,000
	Power input	kW	16.93	18.44	20.34
	Current input	A	28.5-27.1-26.1	31.1-29.5-28.5	34.3-32.6-31.4
	COP	kW / kW	3.72	3.74	3.76
Temp. range of heating *3	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P15~P250/1~50	P15~P250/2~50	P15~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	63	64.5	65.5
Sound power level (measured in anechoic room)		dB <A>	86.5	88	89
Refrigerant piping diameter	High pressure	mm (in.)	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model

Model			PURY-EP250YLM-A (-BS)	PURY-EP250YLM-A (-BS)	PURY-EP250YLM-A (-BS)	PURY-EP300YLM-A (-BS)	PURY-EP300YLM-A (-BS)	PURY-EP300YLM-A (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	185	185	185	230	230	230
		L/s	3,083	3,083	3,083	3,833	3,833	3,833
		cfm	6,532	6,532	6,532	8,121	8,121	8,121
	Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*4	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	6.9	6.9	6.9	8.1	8.1	8.1
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740
		in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection		Over-current protection		Over-current protection	
Refrigerant	Type x original charge		R410A x 8.5 kg (19 lbs)	R410A x 8.5 kg (19 lbs)	R410A x 8.5 kg (19 lbs)	R410A x 9.3 kg (21 lbs)	R410A x 9.3 kg (21 lbs)	R410A x 9.3 kg (21 lbs)
Net weight		kg (lbs)	218 (481)	218 (481)	218 (481)	260 (574)	260 (574)	260 (574)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	High pressure	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4)
	Low pressure	mm (in.)	22.2 (7/8) Brazed	–	22.2 (7/8) Brazed	–	22.2 (7/8) Brazed	–
Optional parts			Outdoor Twinning kit: CMY-ER100VBK-A Joint: CMY-Y102S-G2,CMY-Y102L-G2,CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1		Outdoor Twinning kit: CMY-ER200VBK Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1		Outdoor Twinning kit: CMY-ER200VBK Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1	

HIGH COP

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.
*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
R2 Series - High COP
PURY-EP YSLM-A(-BS)

► Specifications

Model			PURY-EP650YSLM-A (-BS)	PURY-EP700YSLM-A (-BS)	PURY-EP750YSLM-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	73.0	80.0	85.0
	*1	BTU / h	249,100	273,000	290,000
	Power input	kW	22.12	25.97	25.99
	Current input	A	37.3-35.4-34.1	43.8-41.6-40.1	43.8-41.6-40.1
	EER	kW / kW	3.30	3.08	3.27
Temp. range of cooling *3	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)
Heating capacity (Nominal)	*2	kW	81.5	88.0	95.0
	*2	BTU / h	278,100	300,300	324,100
	Power input	kW	22.51	25.28	26.38
	Current input	A	38.0-36.1-34.7	42.6-40.5-39.0	44.5-42.3-40.7
	COP	kW / kW	3.62	3.48	3.60
Temp. range of heating *3	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P15~P250/2~50	P15~P250/2~50	P15~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	65.5	65.5	65.5
Sound power level (measured in anechoic room)		dB <A>	89	89	89
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	34.93 (1-3/8) Brazed

Set Model

Model			PURY-EP300YLM-A (-BS)	PURY-EP350YLM-A (-BS)	PURY-EP350YLM-A (-BS)	PURY-EP350YLM-A (-BS)	PURY-EP350YLM-A (-BS)	PURY-EP400YLM-A (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 2
	Air flow rate	m^3/min	230	230	230	230	230	320
		L/s	3,833	3,833	3,833	3,833	3,833	5,333
		cfm	8,121	8,121	8,121	8,121	8,121	11,299
	Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 2
*4	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.1	10.5	10.5	10.5	10.5	10.9
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,750 x 740
		in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection		Over-current protection		Over-current protection	
Refrigerant	Type x original charge		R410A x 9.3 kg (21 lbs)	R410A x 9.3 kg (21 lbs)	R410A x 9.3 kg (21 lbs)	R410A x 9.3 kg (21 lbs)	R410A x 9.3 kg (21 lbs)	R410A x 11.8 kg (27 lbs)
Net weight		kg (lbs)	260 (574)	260 (574)	260 (574)	260 (574)	260 (574)	338 (746)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	High pressure	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	22.2 (7/8) Brazed	–	28.58 (1-1/8) Brazed	–	28.58 (1-1/8) Brazed	–
Optional parts			Outdoor Twinning kit: CMY-ER200VBK Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1		Outdoor Twinning kit: CMY-ER200VBK Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P1016V-HA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1		Outdoor Twinning kit: CMY-ER200VBK Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P1016V-HA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1	

HIGH COP

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.
*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT
R2 Series - High COP
PURY-EP YSLM-A(-BS)

► Specifications

Model			PURY-EP800YSLM-A (-BS)	PURY-EP850YSLM-A (-BS)	PURY-EP900YSLM-A (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	90.0	96.0	101.0
	*1	BTU / h	307,100	327,600	344,600
	Power input	kW	25.93	28.48	30.98
	Current input	A	43.7-41.5-40.0	48.0-45.6-44.0	52.2-49.6-47.8
	EER	kW / kW	3.47	3.37	3.26
Temp. range of cooling *3	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)
Heating capacity (Nominal)	*2	kW	100.0	108.0	113.0
	*2	BTU / h	341,200	368,500	385,600
	Power input	kW	26.80	29.75	32.01
	Current input	A	45.2-42.9-41.4	50.2-47.7-45.9	54.0-51.3-49.4
	COP	kW / kW	3.73	3.63	3.53
Temp. range of heating *3	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P15~P250/2~50	P15~P250/2~50	P15~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	65.5	65.5	65.5
Sound power level (measured in anechoic room)		dB <A>	89	89	89
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	34.93 (1-3/8) Brazed	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model

Model			PURY-EP400YLM-A (-BS)	PURY-EP400YLM-A (-BS)	PURY-EP400YLM-A (-BS)	PURY-EP450YLM-A (-BS)	PURY-EP450YLM-A (-BS)	PURY-EP450YLM-A (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	320	320	320	320	320	320
		L/s	5,333	5,333	5,333	5,333	5,333	5,333
		cfm	11,299	11,299	11,299	11,299	11,299	11,299
	Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 2	0.92 x 2	0.92 x 2	0.92 x 2
*4	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.9	10.9	10.9	12.4	12.4	12.4
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740
		in.	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor		Over-current protection		Over-current protection		Over-current protection	
Refrigerant	Type x original charge		R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)
Net weight		kg (lbs)	338 (746)	338 (746)	338 (746)	338 (746)	338 (746)	338 (746)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	–	28.58 (1-1/8) Brazed	–	28.58 (1-1/8) Brazed	–
Optional parts			Outdoor Twinning kit: CMY-ER200VBK Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P1016V-HA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1		Outdoor Twinning kit: CMY-ER200VBK Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P1016V-HA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1		Outdoor Twinning kit: CMY-ER200VBK Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P1016V-HA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1	

HIGH COP

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.
*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

HEAT SOURCE UNIT
WR2 (Heat Recovery) Series
PQRY-P YHM-A

► Specifications

Model			PQRY-P200YHM-A	PQRY-P250YHM-A	PQRY-P300YHM-A
Power source			3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz
Cooling capacity (Nominal)	*1	kW	22.4	28.0	33.5
	*1	BTU / h	76,400	95,500	114,300
	Power input	kW	3.96	5.51	7.44
	Current input	A	6.6-6.3-6.1	9.3-8.8-8.5	12.5-11.9-11.5
	EER	kW / kW	5.65	5.08	4.50
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Heating capacity (Nominal)	*2	kW	25.0	31.5	37.5
	*2	BTU / h	85,300	107,500	128,000
	Power input	kW	4.12	5.80	8.15
	Current input	A	6.9-6.6-6.3	9.7-9.3-8.9	13.7-13.0-12.5
	COP	kW / kW	6.06	5.43	4.60
Temp. range of heating	Indoor	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Indoor unit connectable	Total capacity		50~150 % of heat source unit capacity	50~150 % of heat source unit capacity	50~150 % of heat source unit capacity
	Model / Quantity		P15~P250 / 1~20	P15~P250 / 1~25	P15~P250 / 1~30
Sound pressure level (measured in anechoic room)		dB <A>	47	49	50
Refrigerant piping diameter [O.D.]	High pressure	mm (in.)	15.88(5/8) Brazed	19.05(3/4) Brazed	19.05(3/4) Brazed
	Low pressure	mm (in.)	19.05(3/4) Brazed	22.2(7/8) Brazed	22.2(7/8) Brazed
Circulating water	Water flow rate	m^3 / h	5.76	5.76	5.76
		L/min	96	96	96
		cfm	3.4	3.4	3.4
	Pressure drop	kPa	17	17	17
	Operating volume range	m^3 / h	4.5 ~ 7.2	4.5 ~ 7.2	4.5 ~ 7.2
Compressor	Type x Quantity		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	4.6	6.3	7.4
	Case heater	kW	0.035(240 V)	0.035(240 V)	0.035(240 V)
External finish			Acrylic painted steel plate	Acrylic painted steel plate	Acrylic painted steel plate
External dimension HxWxD		mm	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550
		in.	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)
	Inverter circuit (COMP.)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection
Refrigerant	Type x original charge		R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)
Net weight		kg (lbs)	181(400)	181(400)	181(400)
Heat exchanger			plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0
Optional parts			Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-Y202S-G2,CMY-R160-J1	Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-Y202S-G2,CMY-R160-J1	Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-Y202S-G2,CMY-R160-J1

Notes:

*1,*2 Nominal conditions

	Indoor	Water temperature	Pipe length	Level difference
Cooling	27°CD.B./19°CW.B. (81°FD.B./66°FW.B.)	30°C (86°F)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°CD.B. (68°FD.B.)	20°C (68°F)		

*3 The ambient temperature of the heat source unit needs to be kept below 40°CD.B.
*4 The ambient relative humidity of the heat source unit needs to be kept below 80%.
*5 The heat source Unit should not be installed at outdoor.
*6 Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*7 Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

HEAT SOURCE UNIT
WR2 (Heat Recovery) Series
PQRY-P YSHM-A

► Specifications

Model			PQRY-P400YSHM-A	PQRY-P450YSHM-A	PQRY-P500YSHM-A
Power source			3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz
Cooling capacity (Nominal)	*1	kW	45.0	50.0	56.0
	*1	BTU / h	153,500	170,600	191,100
	Power input	kW	8.32	9.94	11.57
	Current input	A	14.0-13.3-12.8	16.7-15.9-15.3	19.5-18.5-17.8
	EER	kW / kW	5.40	5.03	4.84
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Heating capacity (Nominal)	*2	kW	50.0	56.0	63.0
	*2	BTU / h	170,600	191,100	215,000
	Power input	kW	8.65	10.42	12.06
	Current input	A	14.6-13.8-13.3	17.5-16.7-16.1	20.3-19.3-18.6
	COP	kW / kW	5.78	5.37	5.22
Temp. range of heating	Indoor	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Indoor unit connectable	Total capacity		50~150 % of heat source unit capacity	50~150 % of heat source unit capacity	50~150 % of heat source unit capacity
	Model / Quantity		P15~P250 / 1~40	P15~P250 / 1~45	P15~P250 / 1~50 (Connectable branch pipe number is max. 48.)
Sound pressure level (measured in anechoic room)		dB <A>	50	51	52
Refrigerant piping diameter [O.D.]	High pressure	mm (in.)	22.2(7/8) Brazed	22.2(7/8) Brazed	22.2(7/8) Brazed
	Low pressure	mm (in.)	28.58(1-1/8) Brazed	28.58(1-1/8) Brazed	28.58(1-1/8) Brazed

Set Model

Model			PQRY-P200YHM-A	PQRY-P200YHM-A	PQRY-P250YHM-A	PQRY-P200YHM-A	PQRY-P250YHM-A	PQRY-P250YHM-A
Circulating water	Water flow rate	m^3 / h	5.76 + 5.76		5.76 + 5.76		5.76 + 5.76	
		L/min	96 + 96		96 + 96		96 + 96	
		cfm	3.4 + 3.4		3.4 + 3.4		3.4 + 3.4	
	Pressure drop	kPa	17	17	17	17	17	17
	Operating volume range	m^3 / h	4.5 + 4.5 ~ 7.2 + 7.2		4.5 + 4.5 ~ 7.2 + 7.2		4.5 + 4.5 ~ 7.2 + 7.2	
Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	4.6	4.6	6.3	4.6	6.3	6.3
	Case heater	kW	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)
External finish			Acrylic painted steel plate		Acrylic painted steel plate		Acrylic painted steel plate	
External dimension HxWxD		mm	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550
		in.	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Inverter circuit (COMP.)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection		Over-heat protection		Over-heat protection	
Refrigerant	Type x original charge		R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)
Net weight		kg (lbs)	181(400)	181(400)	181(400)	181(400)	181(400)	181(400)
Heat exchanger			plate type	plate type	plate type	plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0	2.0	2.0	2.0
Optional parts			Heat Source Twinning kit: CMY-Q100VBK Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-Y202S-G2,CMY-R160-J1		Heat Source Twinning kit: CMY-Q100VBK Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-Y202S-G2,CMY-R160-J1		Heat Source Twinning kit: CMY-Q100VBK Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-Y202S-G2,CMY-R160-J1	

Notes:

*1,*2 Nominal conditions

	Indoor	Water temperature	Pipe length	Level difference
Cooling	27ºCD.B./19ºCW.B. (81ºFD.B./66ºFW.B.)	30ºC (86ºF)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºCD.B. (68ºFD.B.)	20ºC (68ºF)		

*3 The ambient temperature of the heat source unit needs to be kept below 40ºCD.B.
*4 The ambient relative humidity of the heat source unit needs to be kept below 80%.
*5 The heat source Unit should not be installed at outdoor.
*6 Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*7 Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

HEAT SOURCE UNIT
WR2 (Heat Recovery) Series
PQRY-P YSHM-A

► Specifications

Model			PQRY-P550YSHM-A	PQRY-P600YSHM-A
Power source			3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz
Cooling capacity (Nominal)	*1	kW	63.0	69.0
	*1	BTU / h	215,000	235,400
	Power input	kW	13.60	15.62
	Current input	A	22.9-21.8-21.0	26.3-25.0-24.1
	EER	kW / kW	4.63	4.41
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Heating capacity (Nominal)	*2	kW	69.0	76.5
	*2	BTU / h	235,400	261,000
	Power input	kW	14.65	17.12
	Current input	A	24.7-23.4-22.6	28.9-27.4-26.4
	COP	kW / kW	4.70	4.46
Temp. range of heating	Indoor	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Indoor unit connectable	Total capacity		50~150 % of heat source unit capacity	50~150 % of heat source unit capacity
	Model / Quantity		P15~P250 / 2~50 (Connectable branch pipe number is max. 48.)	P15~P250 / 2~50 (Connectable branch pipe number is max. 48.)
Sound pressure level (measured in anechoic room)		dB <A>	52.5	53
Refrigerant piping diameter [O.D.]	High pressure	mm (in.)	28.58(1-1/8) Brazed	28.58(1-1/8) Brazed
	Low pressure	mm (in.)	28.58(1-1/8) Brazed	28.58(1-1/8) Brazed

Set Model

Model			PQRY-P300YHM-A	PQRY-P250YHM-A	PQRY-P300YHM-A	PQRY-P300YHM-A
Circulating water	Water flow rate	m^3 / h	5.76 + 5.76		5.76 + 5.76	
		L/min	96 + 96		96 + 96	
		cfm	3.4 + 3.4		3.4 + 3.4	
	Pressure drop	kPa	17	17	17	17
	Operating volume range	m^3 / h	4.5 + 4.5 ~ 7.2 + 7.2		4.5 + 4.5 ~ 7.2 + 7.2	
Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	7.4	6.3	7.4	7.4
	Case heater	kW	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)
External finish			Acrylic painted steel plate		Acrylic painted steel plate	
External dimension HxWxD		mm	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550
		in.	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Inverter circuit (COMP.)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
Refrigerant	Type x original charge		R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)
Net weight		kg (lbs)	181(400)	181(400)	181(400)	181(400)
Heat exchanger			plate type	plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0	2.0
Optional parts			Heat Source Twinning kit: CMY-Q100VBK Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-Y202S-G2,CMY-R160-J1		Heat Source Twinning kit: CMY-Q100VBK Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-Y202S-G2,CMY-R160-J1	

Notes:

*1,*2 Nominal conditions

	Indoor	Water temperature	Pipe length	Level difference
Cooling	27ºCD.B./19ºCW.B. (81ºFD.B./66ºFW.B.)	30ºC (86ºF)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºCD.B. (68ºFD.B.)	20ºC (68ºF)		

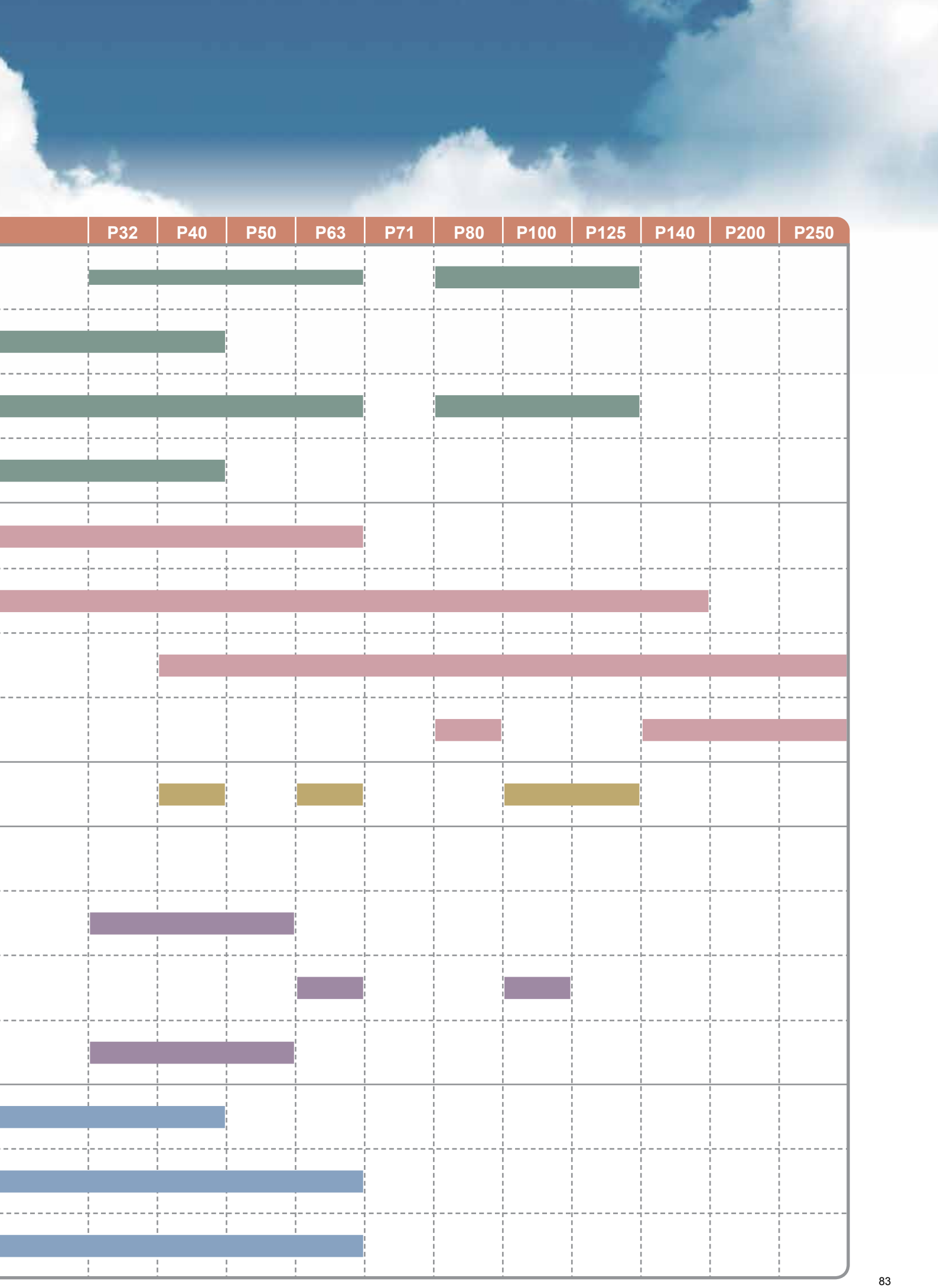
*3 The ambient temperature of the heat source unit needs to be kept below 40ºCD.B.
*4 The ambient relative humidity of the heat source unit needs to be kept below 80%.
*5 The heat source Unit should not be installed at outdoor.
*6 Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*7 Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

Indoor Unit

- Ceiling cassette type 4-way airflow
- Ceiling cassette type 2-way airflow
- Ceiling cassette type 1-way airflow
- Ceiling concealed type
- Fresh Air Intake type
- Ceiling suspended type
- Wall mounted type
- Wall mounted type - Designer Series with external LEV Kit
- Floor standing exposed
- Floor mounted concealed type
- BC Controller
- Air to Water unit
- Lossnay
- Air Handling Unit Controller
- OA Processing Units

Wide Selection of Indoor Units

Type		Model name	Model	P15	P20	P25
Ceiling Cassette	4-way air flow	**PLFY-P VBM-E** Page84 - Page85				
		PLFY-P VCM-E2 Page84 - Page85				
	2-way air flow	**PLFY-P VLMD-E** Page86 - Page87				
	1-way air flow	**PMFY-P VBM-E** Page88 - Page89				
Ceiling Concealed		**PEFY-P VMS1(L)-E** Page90 - Page91				
		PEFY-P VMA(L)-E Page92 - Page93				
		PEFY-P VMH(S)-E Page94 - Page95				
	Fresh Air Intake	**PEFY-P VMH-E-F** Page96 - Page97				
Ceiling Suspended		**PCFY-P VKM-E** Page98 - Page99				
Wall Mounted		**PKFY-P VBM-E** Page100 - Page101				
		PKFY-P VHM-E Page100 - Page101				
		PKFY-P VKM-E Page100 - Page101				
		MSZ-EF Designer Series Page102 - Page103				
Floor Standing/ Floor Mounted Concealed		**PFFY-P VKM-E2** Page104 - Page105				
		PFFY-P VLEM-E Page106 - Page107				
		PFFY-P VLRM-E **PFFY-P VLRMM-E** Page108 - Page109				


P32
P40
P50
P63
P71
P80
P100
P125
P140
P200
P250

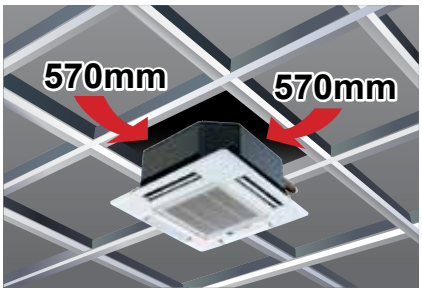
INDOOR UNIT
Ceiling cassette type 4-way airflow
PLFY-P VBM-E i-see Sensor
PLFY-P VCM-E2

PLFY-P VBM

PLFY-P VCM

The new 4-way cassette VBM offers 72 different airflow patterns, making it ideal for applications with ceilings up to 4.2 m (13-13/16ft) in height.

Compact body to match with 2 feet (600mm) x 2 feet (600mm) ceiling design (VCM)



Automatic Air Speed Adjustment

Auto-fan-speed mode enables speedy and comfortable heating during heating startup.

The Auto-fan-speed mode is added to the usual four steps "Low, Mid1, Mid2, High."
The Auto-fan-speed mode enables speedy and comfortable air conditioning because the air flow speeds up when starting, and air flow slows down when the air conditioning becomes stable (PLFY-P VBM-E ONLY).

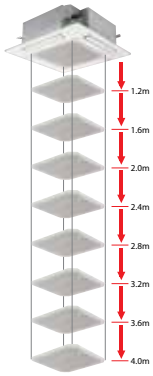
Controls the four fan speed modes automatically

Low → Mid1 → Mid2 → High → Auto

* When using a wireless remote controller, initial settings are required.

Elevating Fitler Panel PLP-6BAJ-OP (PLFY-P VBM-E ONLY)

This automatic elevating filter panel is designed for easy cleaning when cassettes are installed in high ceilings.
This optional panel enables the filter to be lowered down to 4m below the cassette via a service remote.



Wide Air Flow (PLFY-P VBM-E ONLY)

Cooling softly with Wide Air Flow

Discharged air reaches a wider area and the fan speed is decreased by 20% thanks to the new wide shape air outlet.

72 patterns of airflow to accommodate any room layout are available.

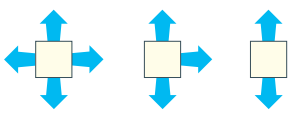
First in the industry
*On the commercial air conditioners (According to the survey by Mitsubishi Electric)

The number of outlets can be set to 4, 3, or 2. Flexible airflow is available by fixing the up-down airflow direction of the outlet with a wired remote controller (or manually).

72 airflow patterns

=

4-, 3-, or 2- way outlet selection*



* Optional parts air outlet shutter plate (PLFY-P VBM-E ONLY) is required for 2 or 3 way outlet selection.

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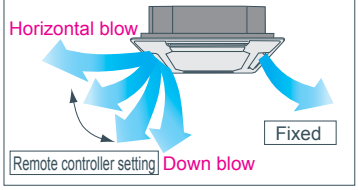
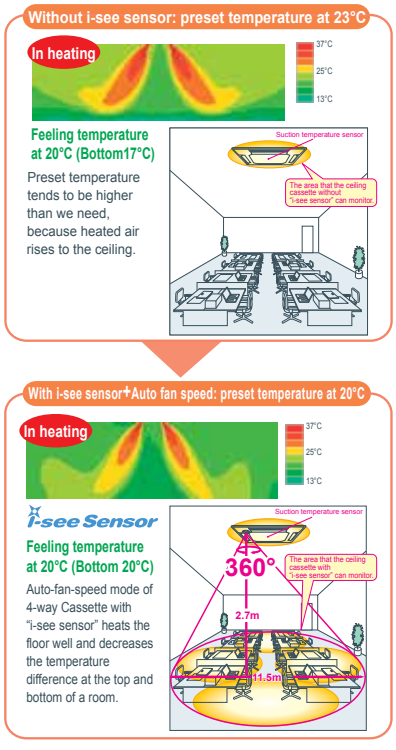
Setting the air direction for each outlet with wired remote controller



"i-see sensor" can be used with ceiling cassette type 4-way airflow unit (Option PAC-SA1ME-E, PLFY-VBM-E ONLY).

New 4-way Cassette PLFY-VBM controls the temperature difference at the top and bottom in a room by checking the floor temperature with "i-see sensor". Comfortable air conditioning can be achieved with "sensible temperature control." (Option PAC-SA1ME-E, PLFY-VBM-E ONLY)

Prevents overcooling/overheating, and improves comfort/energy-efficiency



Specifications

Full size cassettes

				PLFY-P32VBM-E	PLFY-P40VBM-E	PLFY-P50VBM-E	PLFY-P63VBM-E	PLFY-P80VBM-E	PLFY-P100VBM-E	PLFY-P125VBM-E
Power source				1-phase 220-240V 50Hz / 1-phase 220V 60Hz					1-phase 220-240V 50Hz / 1-phase 220V 60Hz	
Cooling capacity		*1	kW	3.6	4.5	5.6	7.1	9.0	11.2	14.0
		*1	BTU/h	12,300	15,400	19,100	24,200	30,700	38,200	47,800
Heating capacity		*1	kW	4.0	5.0	6.3	8.0	10.0	12.5	16.0
		*1	BTU/h	13,600	17,100	21,500	27,300	34,100	42,700	54,600
Power consumption	Cooling		kW	0.03	0.04	0.04	0.05	0.07	0.15	0.16
	Heating		kW	0.02	0.03	0.03	0.04	0.06	0.14	0.15
Current	Cooling		A	0.27	0.29	0.29	0.36	0.51	1.00	1.07
	Heating		A	0.20	0.22	0.22	0.29	0.43	0.94	1.00
External finish (Munsell No.)	Unit			Galvanized steel sheet					Galvanized steel sheet	
	Panel			MUNSELL (6.4Y 8.9/0.4)						
Dimension H x W x D	Unit		mm(in.)	258 x 840 x 840 (10-3/16 x 33-1/8 x 33-1/8)					298 x 840 x 840 (11-3/4 x 33-1/8 x 33-1/8)	
	Panel		mm(in.)	35 x 950 x 950 (1-3/8 x 37-7/16 x 37-7/16)					35 x 950 x 950 (1-3/8 x 37-7/16 x 37-7/16)	
Net weight	Unit		kg(lbs.)	22 (49)			23 (51)		27 (60)	
	Panel		kg(lbs.)	6 (13)					6 (13)	
Heat exchanger				Cross fin (Aluminum fin and copper tube)						
Fan	Type x Quantity			Turbo fan x 1						
	Airflow rate (Lo-Mid1-Mid2-Hi)	*2	m^3/min	11-12-13-14	12-13-14-16		14-15-16-18	16-18-20-22	21-24-27-29	22-25-28-30
			L/s	183-200-217-233	200-217-233-267		233-250-267-300	267-300-333-367	350-400-450-483	367-417-467-500
			cfm	388-424-459-494	424-459-494-565		494-530-565-636	565-636-706-777	742-848-953-1024	777-883-989-1059
	External static pressure		Pa	0						
Motor	Type			DC motor					DC motor	
	Output		kW	0.050					0.120	
Air filter				PP Honeycomb					PP Honeycomb	
Refrigerant pipe diameter	Gas (Flare)		mm(in.)	ø12.7 (ø1/2)		ø12.7 (ø1/2) / ø15.88 (ø5/8) (Compatible)	ø15.88(ø5/8)		ø15.88 (ø5/8) / ø19.05 (ø3/4) (Compatible)	
	Liquid (Flare)		mm(in.)	ø6.35 (ø1/4)		ø6.35 (ø1/4) / ø9.52 (ø3/8) (Compatible)	ø9.52 (ø3/8)		ø9.52 (ø3/8)	
Field drain pipe diameter			mm(in.)	O.D. 32 (1-1/4)					O.D. 32 (1-1/4)	
Sound pressure level (Lo-Mid1-Mid2-Hi)		*2 *3	dB(A)	27-28-29-31	27-28-30-31		28-29-30-32	30-32-35-37	34-37-39-41	35-38-41-43

Compact cassettes

				PLFY-P15VCM-E2	PLFY-P20VCM-E2	PLFY-P25VCM-E2	PLFY-P32VCM-E2	PLFY-P40VCM-E2
Power source				1-phase 220-240V 50Hz				
Cooling capacity		*1	kW	1.7	2.2	2.8	3.6	4.5
		*1	BTU/h	5,800	7,500	9,600	12,300	15,400
Heating capacity		*1	kW	1.9	2.5	3,2	4.0	5.0
		*1	BTU/h	6,500	8,500	10,900	13,600	17,100
Power consumption	Cooling		kW	0.04	0.05	0.05	0.06	0.06
	Heating		kW	0.04	0.05	0.05	0.06	0.06
Current	Cooling		A	0.19	0.23	0.23	0.28	0.28
	Heating		A	0.19	0.23	0.23	0.28	0.28
External finish (Munsell No.)	Unit			Galvanized steel sheet with gray heat insulation				
	Panel			MUNSELL (6.4Y 8.9/0.4)				
Dimension H x W x D	Unit		mm(in.)	208 x 570 x 570 (8-1/4 x 22-1/2 x 22-1/2)				
	Panel		mm(in.)	20 x 650 x 650 (13/16 x 25-5/8 x 25-5/8)				
Net weight	Unit		kg(lbs.)	15.5 (35)			17 (38)	
	Panel		kg(lbs.)	3 (7)				
Heat exchanger				Cross fin (Aluminum fin and copper tube)				
Fan	Type x Quantity			Turbo fan x 1				
	Airflow rate (Lo-Mid-Hi) (Lo-Mid1-Mid2-Hi)	*2	m^3/min	8-8.5-9	8-9-10	8-9-10	8-9-11	8-9-11
			L/s	133-142-150	133-150-167	133-150-167	133-150-183	133-150-183
			cfm	283-300-353	283-318-353	283-318-353	283-318-388	283-318-388
	External static pressure		Pa	0				
Motor	Type			1-phase induction motor				
	Output		kW	0.008	0.011	0.015	0.02	0.02
Air filter				PP Honeycomb fabric (long life type)				
Refrigerant pipe diameter	Gas (Flare)		mm(in.)	ø12.7 (ø1/2)				
	Liquid (Flare)		mm(in.)	ø6.35 (ø1/4)				
Field drain pipe diameter			mm(in.)	O.D. 32 (1-1/4) (PVC pipe VP-25 connectable)				
Sound pressure level (Lo-Mid-Hi) (Lo-Mid1-Mid2-Hi)		*2 *3	dB(A)	28-30-31	28-31-35	29-31-37	29-33-38	30-34-39

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor 27°C(81°F)DB/19°C(66°F)WB,Outdoor 35°C(95°F)DB
Heating : Indoor 20°C(68°F)DB,Outdoor 7°C(45°F)DB/6°C(43°F)WB

*2 Airflow rate/Sound pressure level are in (Lo-Mid-Hi) or (Lo-Mid1-Mid2-Hi).

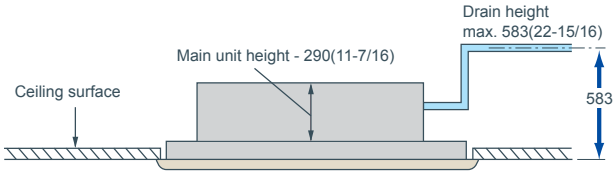
*3 It is measured in anechoic room at power source 230V.

INDOOR UNIT
Ceiling cassette type 2-way airflow
PLFY-P VLMD-E

Slim body of 290mm(11-7/16in.) height

Equipped with drain pump mechanism as standard

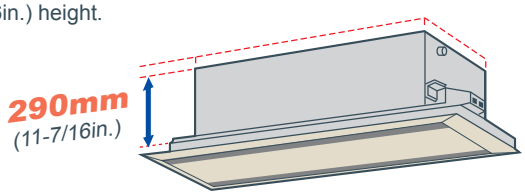
The drain can be positioned anywhere up to 583mm(22-15/16in.) from the ceiling's surface, providing greater freedom with long cross-piping and allowing more versatility with piping layouts.



mm (in.)

Slim body - only 290mm(11-7/16in.) height

The slimline body is highly suitable for installation in narrow ceiling spaces and for replacing obsolete air-conditioning equipment in older buildings. The main unit is only 290mm(11-7/16in.) height.



Terminal block on outside of main unit makes wiring easier

Compact unit and low noise level attained!

Sound pressure level table (Standard static pressure) at 0Pa

dB(A)

	Capacity		P20	P25	P32	P40	P50	P63	P80	P100	P125
Sound pressure Level	Fan Speed	High	33			36	37	39	39	42	46
		Mid	30			33	34	37	36	39	42/44
		Low	27			29	31	32	33	36	40

<220V,240V>

dB(A)

	Capacity		P20	P25	P32	P40	P50	P63	P80	P100	P125
Sound pressure Level	Fan Speed	High	34			37	38	40	40	43	46
		Mid	31			34	35	38	37	41	42/44
		Low	28			30	32	33	34	37	40

<230V>

Fresh air directly taken in

Fresh air can be taken in to the main unit directly (optional accessories needed.)

Long life filter equipped as standard

The antibacterial long life filter does not require maintenance for approximately a year.

Easy installation

Lighter panel and placing the electric board near the panel make installation and maintenance easier. Also, the heat exchanger is washable by displacing the center panel, filter, and fan.

▸Specifications

				PLFY-P20VLMD-E	PLFY-P25VLMD-E	PLFY-P32VLMD-E	PLFY-P40VLMD-E
Power source				1-phase 220-240V 50Hz / 1-phase 220-230V 60Hz			
Cooling capacity		*1	kW	2.2	2.8	3.6	4.5
		*1	BTU/h	7,500	9,600	12,300	15,400
Heating capacity		*1	kW	2.5	3.2	4.0	5.0
		*1	BTU/h	8,500	10,900	13,600	17,100
Power consumption	Cooling		kW	0.072 / 0.075	0.072 / 0.075	0.072 / 0.075	0.081 / 0.085
	Heating		kW	0.065 / 0.069	0.065 / 0.069	0.065 / 0.069	0.074 / 0.079
Current	Cooling		A	0.36 / 0.37	0.36 / 0.37	0.36 / 0.37	0.40 / 0.42
	Heating		A	0.30 / 0.32	0.30 / 0.32	0.30 / 0.32	0.34 / 0.37
External finish (Munsell No.)	Unit			Galvanized steel plate			
	Panel			Pure white (6.4Y 8.9/0.4)			
Dimension H x W x D	Unit		mm (in.)	290 x 776 x 634 (11-7/16 x 30-9/16 x 25)			
	Panel		mm (in.)	20 x 1080 x 710 (13/16 x 42-9/16 x 28)			
Net weight	Unit		kg(lbs.)	23 (51)		24 (53)	
	Panel		kg(lbs.)	6.5 (15)			
Heat exchanger				Cross fin			
Fan	Type x Quantity			Turbo fan x 1			
	Airflow rate (Lo-Mid-Hi)	*2	m^3/min	6.5-8.0-9.5			7.0-8.5-10.5
			L/s	108-133-158			117-142-175
			cfm	230-283-335			247-300-371
	External static pressure		Pa	0			
Motor	Type			1-phase induction motor			
	Output		kW	0.015 (at 240V)			
Air filter				PP honeycomb fabric (long life type)			
Refrigerant pipe diameter	Gas(Flare)		mm(in.)	ø12.7 (ø1/2)			
	Liquid(Flare)		mm(in.)	ø6.35 (ø1/4)			
Field drain pipe diameter			mm(in.)	O.D.32 (1-1/4)			
Sound pressure level (Lo-Mid-Hi)	220V,240V	*2 *3	dB(A)	27-30-33			29-33-36
	230V	*2 *3	dB(A)	28-31-34			30-34-37

				PLFY-P50VLMD-E	PLFY-P63VLMD-E	PLFY-P80VLMD-E	PLFY-P100VLMD-E	PLFY-P125VLMD-E
Power source				1-phase 220-240V 50Hz / 1-phase 220-230V 60Hz				
Cooling capacity		*1	kW	5.6	7.1	9.0	11.2	14.0
		*1	BTU/h	19,100	24,200	30,700	38,200	47,800
Heating capacity		*1	kW	6.3	8.0	10.0	12.5	16.0
		*1	BTU/h	21,500	27,300	34,100	42,700	54,600
Power consumption	Cooling		kW	0.082 / 0.086	0.101 / 0.105	0.147 / 0.156	0.157 / 0.186	0.28 / 0.28
	Heating		kW	0.075 / 0.080	0.094 / 0.099	0.140 / 0.150	0.150 / 0.180	0.27 / 0.27
Current	Cooling		A	0.41 / 0.43	0.49 / 0.51	0.72 / 0.74	0.75 / 0.88	1.35 / 1.35
	Heating		A	0.35 / 0.38	0.43 / 0.46	0.66 / 0.69	0.69 / 0.83	1.33 / 1.33
External finish (Munsell No.)	Unit			Galvanized steel plate				
	Panel			Pure white (6.4Y 8.9 / 0.4)				
Dimension H x W x D	Unit		mm (in.)	290 x 946 x 634 (11-7/16 x 37-1/4 x 25)		290 x 1446 x 634 (11-7/16 x 56-15/16 x 25)		290 x 1708 x 606 (11-7/16 x 67-1/4 x 23-7/8)
	Panel		mm (in.)	20 x 1250 x 710 (13/16 x 49-1/4 x 28)		20 x 1750 x 710 (13/16 x 68-15/16 x 28)		20 x 2010 x 710 (13/16 x 79-3/16 x 28)
Net weight	Unit		kg(lbs.)	27 (60)	28 (62)	44 (98)	47 (104)	56 (124)
	Panel		kg(lbs.)	7.5 (17)		12.5 (28)		13.0 (29)
Heat exchanger				Cross fin				
Fan	Type x Quantity			Turbo fan x 1		Turbo fan x 2		Sirocco fan x 4
	Airflow rate (P50~P100:Lo-Mid-Hi)	*2	m^3/min	9.0-11.0-12.5	11.0-13.0-15.5	15.5-18.5-22.0	17.5-21.0-25.0	24.0-27.0-30.0-33.0
			L/s	150-183-208	167-217-258	258-308-367	292-350-417	400-450-500-550
	(P125:Lo-Mid2-Mid1-Hi)		cfm	318-388-441	353-459-547	547-653-777	618-742-883	848-953-1,059-1,165
	External static pressure		Pa	0				
Motor	Type			1-phase induction motor				
	Output		kW	0.020 (at 240V)		0.020 (at 240V)	0.030 (at 240V)	0.078 x 2 (at 240V)
Air filter				PP honeycomb fabric (long life type)				Synthetic fiber unwoven cloth filter (long life)
Refrigerant pipe diameter	Gas (Flare)		mm(in.)	ø12.7 (ø1/2)	ø15.88 (ø5/8)			
	Liquid (Flare)		mm(in.)	ø6.35 (ø1/4)	ø9.52 (ø3/8)			
Field drain pipe diameter			mm(in.)	O.D.32 (1-1/4)				
Sound pressure level (Lo-Mid-Hi)	220V,240V	*2 *3	dB(A)	31-34-37	32-37-39	33-36-39	36-39-42	40-42-44-46 (Lo-Mid2-Mid1-Hi)
	230V	*2 *3	dB(A)	32-35-38	33-38-40	34-37-40	37-41-43	

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor 27°C(81°F)DB/19°C(66°F)WB,Outdoor 35°C(95°F)DB
Heating : Indoor 20°C(68°F)DB,Outdoor 7°C(45°F)DB/6°C(43°F)WB

*2 Airflow rate/Sound pressure level are in (low-middle-high) or (low-middle2-middle1-high).

*3 It is measured in anechoic room.

INDOOR UNIT
Ceiling cassette type 1-way airflow
PMFY-P VBM-E

Compact and lightweight body perfect for limited ceiling space applications.

Compact size for smooth installation and maintenance

Unit body size has been standardized for all models at 812mm for easier installation. Body weight is only 14kg for the main unit and 3kg for the panel, making this unit one of the lightest in the industry.

Quiet operation

Newly developed airflow control technology reduces noise level to only 27dB (P20VBM) for industry-leading quiet performance.

Sound pressure level table

	Capacity		P20	P25	P32	P40
Sound pressure level	Fan Speed	High	35	37		39
		Mid 1	33	36		37
		Mid 2	30	34		35
		Low	27	32		33

<220V,240V>

Drain pump

The drain can be positioned anywhere up to 600mm(23-5/8in.) from the ceiling's surface.

mm (in.)

▸Specifications

			PMFY-P20VBM-E	PMFY-P25VBM-E	PMFY-P32VBM-E	PMFY-P40VBM-E
Power source			1-phase 220-240V 50Hz / 1-phase 220V 60Hz			
Cooling capacity	*1	kW	2.2	2.8	3.6	4.5
	*1	BTU/h	7,500	9,600	12,300	15,400
Heating capacity	*1	kW	2.5	3.2	4.0	5.0
	*1	BTU/h	8,500	10,900	13,600	17,100
Power consumption	Cooling	kW	0.042	0.044		0.054
	Heating	kW	0.042	0.044		0.054
Current	Cooling	A	0.20	0.21		0.26
	Heating	A	0.20	0.21		0.26
External finish (Munsell No.)			White (0.98Y 8.99/0.63)			
Dimension H x W x D	Unit	mm(in.)	230 x 812 x 395 (9-1/16 x 32 x 15-9/16)			
	Panel	mm(in.)	30 x 1000 x 470 (1-3/16 x 39-3/8 x 18-9/16)			
Net weight	Unit	kg(lbs.)	14 (31)			
	Panel	kg(lbs.)	3 (7)			
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)			
Fan	Type		Line flow fan x 1			
	Airflow rate (Lo-Mid2-Mid1-Hi) *2	m^3/min	6.5-7.2-8.0-8.7	7.3-8.0-8.6-9.3		7.7-8.7-9.7-10.7
		L/s	108-120-133-145	122-133-143-155		128-145-162-178
		cfm	230-254-283-307	258-283-304-328		272-307-343-378
	External staticpressure	Pa	0			
Motor	Type		1-phase induction motor			
	Output	kW	0.028			
Air filter			PP Honeycomb fabric			
Refrigerant pipe diameter	Gas(Flare)	mm(in.)	ø12.7 (ø1/2)			
	Liquid(Flare)	mm(in.)	ø6.35 (ø1/4)			
Field drain pipe diameter		mm(in.)	O.D. 26 (1)			
Sound pressure level (Lo-Mid2-Mid1-Hi) *2 *3		dB(A)	27-30-33-35	32-34-36-37		33-35-37-39

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor 27°C(81°F)DB/19°C(66°F)WB,Outdoor 35°C(95°F)DB
Heating : Indoor 20°C(68°F)DB,Outdoor 7°C(45°F)DB/6°C(43°F)WB

*2 Airflow rate/Sound pressure level are in (low-middle2-middle1-high).

*3 It is measured in anechoic room.

INDOOR UNIT
Low Static Ducted Units

PEFY-P VMS1(L)-E

Static Pressure	Height	Low Noise	Width	Width	Width
5~50Pa	200mm (7-28/32in.)		790mm (31-1/8in.)	990mm (39in.)	1,190mm (46-7/8in.)

The ultra thin unit of 200mm offers increased flexibility, and is particularly suitable for places where low noise operation is desired from a slim line body.

Changeable static pressure

The unit is made suitable for a variety of applications with its four static pressure settings of 5, 15, 35, 50Pa.

Changeable airflow rate

Low, middle, and high fan speed settings deliver precise comfort.

Choice for drain pump

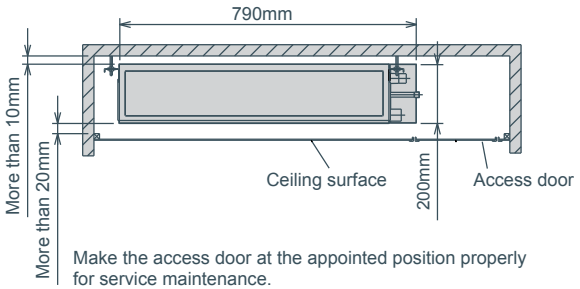
Drain pump is an optional part for the VMS1L, and a standard for VMS1.
*For places where low noise operation is especially required (i.e. Hotels), VMS1L (without drain pump) is recommended.

PP Honeycomb fabric

Washable PP Honeycomb fabric filter as standard.

Ultra low height unit with 200mm (7-28/32in.) high Ultra-narrow width of 790mm (P15-P32 models) [990mm for P40,50 models / 1190mm for P63 models]

Can be installed easily in tight spaces, such as ceiling cavities or drop-ceilings.



Make the access door at the appointed position properly for service maintenance.

Reduced noise thanks to the use of newly designed centrifugal fan and coil

Sound pressure level table (Standard static pressure) at 15Pa

dB(A)

	Capacity		P15	P20	P25	P32	P40	P50	P63
Sound pressure Level	Fan Speed	High	28	29	30	32	33	35	36
		Mid	24	25	26	27	30	32	33
		Low	22	23	24	24	28	30	30

▸Specifications

			PEFY-P15VMS1(L)-E	PEFY-P20VMS1(L)-E	PEFY-P25VMS1(L)-E	PEFY-P32VMS1(L)-E	PEFY-P40VMS1(L)-E	PEFY-P50VMS1(L)-E	PEFY-P63VMS1(L)-E
Power source			1-phase 220-240V 50Hz / 1-phase 220-240V 60Hz						
Cooling capacity	*1	kW	1.7	2.2	2.8	3.6	4.5	5.6	7.1
	*1	BTU/h	5,800	7,500	9,600	12,300	15,400	19,100	24,200
Heating capacity	*1	kW	1.9	2.5	3.2	4.0	5.0	6.3	8.0
	*1	BTU/h	6,500	8,500	10,900	13,600	17,100	21,500	27,300
Power consumption *3	Cooling	kW	0.05 [0.03]	0.05 [0.03]	0.06 [0.04]	0.07 [0.05]	0.07 [0.05]	0.09 [0.07]	0.09 [0.07]
	Heating	kW	0.03 [0.03]	0.03 [0.03]	0.04 [0.04]	0.05 [0.05]	0.05 [0.05]	0.07 [0.07]	0.07 [0.07]
Current *3	Cooling	A	0.42 [0.31]	0.47 [0.36]	0.50 [0.39]	0.50 [0.39]	0.56 [0.45]	0.67 [0.56]	0.72 [0.61]
	Heating	A	0.31 [0.31]	0.36 [0.36]	0.39 [0.39]	0.39 [0.39]	0.45 [0.45]	0.56 [0.56]	0.61 [0.61]
External finish			Galvanized						
Dimension H x W x D		mm	200 x 790 x 700				200 x 990 x 700		200 x 1,190 x 700
		In.	7-7/8 x 31-1/8 x 27-9/16				7-7/8 x 39 x 27-9/16		7-7/8 x 46-7/8 x 27-9/16
Net weight *3		kg(lbs.)	19(42) [18(40)]			20(45) [19(42)]	24(53) [23(51)]		28(62) [27(60)]
Heat exchanger			Cross fin (Aluminium fin and copper tube)						
Fan	Type x Quantity		Sirocco fan x 2				Sirocco fan x 3		Sirocco fan x 4
	Airflow rate (Lo-Mid-Hi)	m^3/min	5-6-7	5.5-6.5-8	5.5-7-9	6-8-10	8-9.5-11	9.5-11-13	12-14-16.5
		L/s	83-100-117	91-108-133	91-117-150	100-133-167	133-158-183	158-183-217	200-233-275
		cfm	176-212-247	194-229-282	194-247-317	212-282-353	282-335-388	335-388-459	424-494-583
	External static press	Pa	5-15-35-50						
Motor	type		DC motor						
	output	kW	0.096						
Air filter			PP Honeycomb fabric (washable)						
Refrigerant pipe diameter	Gas	mm(in.)	ø12.7 (ø1/2) Brazed						ø15.88 (ø5/8) Brazed
	Liquid	mm(in.)	ø6.35 (ø1/4) Brazed						ø9.52 (ø3/8) Brazed
Field drain pipe diameter		mm(in.)	O.D. 32 (1-1/4)						
Sound pressure level (Lo-Mid-Hi) (mesured in anechoic room)		dB<A>	22-24-28	23-25-29	24-26-30	24-27-32	28-30-33	30-32-35	30-33-36

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor : 27°CD.B./19°CW.B. (81°FD.B. / 66°FW.B.) Outdoor : 35°CD.B. (95°FD.B.)
Heating : Indoor : 20°CD.B. (68°FD.B.) Outdoor : 7°CD.B. / 6°CW.B. (45°FD.B. / 43°FW.B.)
Pipe length : 7.5m (24-9/16ft) Height difference : 0m (0ft)

*2 The external static pressure is set to 15 Pa at factory shipment.

*3 [ ] is in case of PEFY-P15-63VMS1L-E

INDOOR UNIT
Mid Static Ducted Units

PEFY-P VMA(L)-E

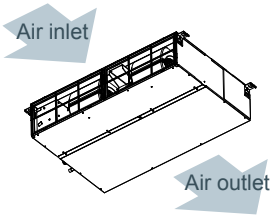
Middle Static Pressure 35~150Pa

Slim Body Height 250mm

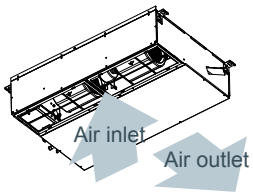
Precise control of indoor temperatures while operating with optimum energy usage, offering a high-energy saving efficiency.

Air Inlet

(1) Rear inlet



(2) Bottom inlet



Compact Indoor Units

For all models, unit heights are unified to 250mm. Compared to the previous model, the height size is reduced, allowing installation in tight spaces, such as ceiling cavities or drop-ceilings.

Reduction in height size

PEFY-P VMA(L)		20	25	32	40	50	63	71	80	100	125	140
Height	mm	250										
Width	mm	700			900		1,100			1,400		1,600
Depth	mm	732										

Drain Pump Option

The line-up consists of two types, models with or without a built-in drain pump allowing more freedom in piping layout design.

PEFY-P VMA-E Drain pump built-in

PEFY-P VMAL-E No Drain pump

* Units with a "L" at the end of the model name are not equipped with a drain pump.

External static pressure

Five-stage external static pressure settings provide flexibility for duct extension, branching and air outlet configuration and are adjustable to meet different application conditions.
Setting ranges to a maximum of 150Pa.

External static pressure setting

Series	20	25	32	40	50	63	71	80	100	125	140
PEFY-P VMA(L)	35/50/70/100/150Pa										

Analogue input

Analogue input allows units to control the fan speed setting in conjunction with damper conditions.

IT terminal

IT terminals are available. For details, contact your local distributor.

▸Specifications

			PEFY-P20VMA(L)-E	PEFY-P25VMA(L)-E	PEFY-P32VMA(L)-E	PEFY-P40VMA(L)-E	PEFY-P50VMA(L)-E
Power source			1-phase 220-230-240V 50 / 60Hz				
Cooling capacity *1		kW	2.2	2.8	3.6	4.5	5.6
(Nominal) *1		BTU/h	7,500	9,600	12,300	15,400	19,100
Heating capacity *2		kW	2.5	3.2	4.0	5.0	6.3
(Nominal) *2		BTU/h	8,500	10,900	13,600	17,100	21,500
Power consumption	Cooling *3	kW	0.06 [0.04]	0.06 [0.04]	0.07 [0.05]	0.09 [0.07]	0.11 [0.09]
	Heating *3	kW	0.04	0.04	0.05	0.07	0.09
Current	Cooling *3	A	0.53 [0.42]	0.53 [0.42]	0.55 [0.44]	0.64 [0.53]	0.74 [0.63]
	Heating *3	A	0.42	0.42	0.44	0.53	0.63
External finish			Galvanized steel plate				
Dimension H x W x D		mm	250 x 700 x 732	250 x 700 x 732	250 x 700 x 732	250 x 900 x 732	250 x 900 x 732
		in.	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 35-7/16 x 28-7/8	9-7/8 x 35-7/16 x 28-7/8
Net weight		kg(lbs)	23 (51) [22 (49)]	23 (51) [22 (49)]	23 (51) [22 (49)]	26 (58) [25 (56)]	26 (58) [25 (56)]
Heat exchanger			Cross fin (Aluminum fin and copper tube)				
Fan	Type x Quantity		Sirocco fan x 1				
	Airflow rate (Low-Mid-High)	m³/min	6.0 - 7.5 - 8.5	6.0 - 7.5 - 8.5	7.5 - 9.0 - 10.5	10.0 - 12.0 - 14.0	12.0 - 14.5 - 17.0
		L/s	100 - 125 - 142	100 - 125 - 142	125 - 150 - 175	167 - 200 - 233	200 - 242 - 283
		cfm	212 - 265 - 300	212 - 265 - 300	265 - 318 - 371	353 - 424 - 494	424 - 512 - 600
	External static pressure *4	Pa	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>
Motor	Type		DC motor				
	Output	kW	0.085	0.085	0.085	0.085	0.085
Air filter			PP honeycomb fabric.				
Refrigerant pipe diameter	Liquid (R410A) (R22,R407C)	mm(in.)	6.35 (1/4) Brazed 6.35 (1/4) Brazed	6.35 (1/4) Brazed 6.35 (1/4) Brazed	6.35 (1/4) Brazed 6.35 (1/4) Brazed	6.35 (1/4) Brazed 6.35 (1/4) Brazed	6.35 (1/4) Brazed 9.52 (3/8) Brazed
	Gas (R410A) (R22,R407C)	mm(in.)	12.7 (1/2) Brazed 12.7 (1/2) Brazed	12.7 (1/20) Brazed 12.7 (1/20) Brazed	12.7 (1/20) Brazed 12.7 (1/20) Brazed	12.7 (1/20) Brazed 12.7 (1/2) Brazed	12.7 (1/2) Brazed 15.88 (5/8) Brazed
Field drain pipe diameter		mm(in.)	O.D.32 (1-1/4)	O.D.32(1-1/4)	O.D.32(1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)
Sound pressure level (measured in anechoic room)							
(Low-Mid-High) *3 *5		dB(A)	26-28-29	26-28-29	28-30-34	28-30-34	28-32-35
*3 *6		dB(A)	23-25-26	23-25-26	23-26-29	23-27-30	25-29-32

			PEFY-P63VMA(L)-E	PEFY-P71VMA(L)-E	PEFY-P80VMA(L)-E	PEFY-P100VMA(L)-E	PEFY-P125VMA(L)-E	PEFY-P140VMA(L)-E
Power source			1-phase 220-230-240V 50 / 60Hz					
Cooling capacity *1		kW	7.1	8.0	9.0	11.2	14.0	16.0
(Nominal) *1		BTU/h	24,200	27,300	30,700	38,200	47,800	54,600
Heating capacity *2		kW	8.0	9.0	10.0	12.5	16.0	18.0
(Nominal) *2		BTU/h	27,300	30,700	34,100	42,700	54,600	61,400
Power consumption	Cooling *3	kW	0.12 [0.10]	0.14 [0.12]	0.14 [0.12]	0.24 [0.22]	0.34 [0.32]	0.36 [0.34]
	Heating *3	kW	0.10	0.12	0.12	0.22	0.32	0.34
Current	Cooling *3	A	1.01 [0.90]	1.15 [1.04]	1.15 [1.04]	1.47 [1.36]	2.05 [1.94]	2.21 [2.10]
	Heating *3	A	0.90	1.04	1.04	1.36	1.94	2.10
External finish			Galvanized steel plate					
Dimension H x W x D		mm	250 x 1,100 x 732	250 x 1,100 x 732	250 x 1,100 x 732	250 x 1,400 x 732	250 x 1,400 x 732	250 x 1,600 x 732
		in.	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 63 x 28-7/8
Net weight		kg(lbs)	32 (71) [31(69)]	32 (71) [31 (69)]	32 (71) [31 (69)]	42 (93) [41 (91)]	42 (93) [41 (91)]	46 (102) [45 (10)]
Heat exchanger			Cross fin (Aluminum fin and copper tube)					
Fan	Type x Quantity		Sirocco fan x 2					
	Airflow rate (Low-Mid-High)	m³/min	13.5 - 16.0 - 19.0	14.5 - 18.0 - 21.0	14.5 - 18.0 - 21.0	23.0 - 28.0 - 33.0	28.0 - 34.0 - 40.0	29.5 - 35.5 - 42.0
		L/s	225 - 267 - 317	242 - 300 - 350	242 - 300 - 350	383 - 467 - 550	467 - 567 - 667	492 - 592 - 700
		cfm	477 - 565 - 671	512 - 636 - 742	512 - 636 - 742	812 - 989 - 1,165	989 - 1,201 - 1,412	1,042 - 1,254 - 1,483
	External static pressure *4	Pa	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>
Motor	Type		DC motor					
	Output	kW	0.121	0.121	0.121	0.244	0.244	0.244
Air filter			PP honeycomb fabric.					
Refrigerant pipe diameter	Liquid (R410A) (R22,R407C)	mm(in.)	9.52 (3/8) Brazed 9.52 (3/8) Brazed	9.52 (3/8) Brazed 9.52 (3/8) Brazed	9.52 (3/8) Brazed 9.52 (3/8) Brazed	9.52 (3/8) Brazed 9.52 (3/8) Brazed	9.52 (3/8) Brazed 9.52 (3/8) Brazed	9.52 (3/8) Brazed 9.52 (3/8) Brazed
	Gas (R410A) (R22,R407C)	mm(in.)	15.88 (5/8) Brazed 15.88 (5/8) Brazed	15.88 (5/8) Brazed 15.88 (5/8) Brazed	15.88 (5/8) Brazed 15.88 (5/8) Brazed	15.88 (5/8) Brazed 19.05 (3/4) Brazed	15.88 (5/8) Brazed 19.05 (3/4) Brazed	15.88 (5/8) Brazed 19.05 (3/4) Brazed
Field drain pipe diameter		mm(in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)
Sound pressure level (measured in anechoic room)								
(Low-Mid-High) *3 *5		dB(A)	29-32-36	30-34-38	30-34-38	32-37-41	35-40-44	36-41-45
*3 *6		dB(A)	25-29-33	26-29-34	26-29-34	28-33-37	32-36-40	33-37-42

Notes:

* [ ] is in case of PEFY-P VMAL-E

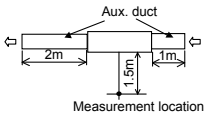
*1 Nominal cooling conditions
Indoor: 27°CDB/19°CWB(81°FDB/66°FWB), Outdoor: 35°CDB(95°FDB)
Pipe length: 7.5m(24-9/16ft.), Level difference: 0m(0ft.)

*2 Nominal heating conditions
Indoor: 20°CDB(68°FDB), Outdoor: 7°CDB/6°CWB(45°FDB/43°FWB)
Pipe length: 7.5m(24-9/16ft.), Level difference: 0m(0ft.)

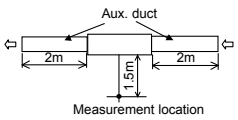
*3 The values are measured at the rated external static pressure.

*4 The rated external static pressure is shown without < >.The factory setting is the rated value.

*5 Measured in anechoic room with a 1m air inlet duct and 2m air outlet duct attached to the unit and 1.5m below the unit.



*6 Measured in anechoic room with a 2m air inlet duct and 2m air outlet duct attached to the unit and 1.5m below the unit.



INDOOR UNIT
High Static Ducted Units

PEFY-P VMH(S)-E

High Static Pressure

Increased design flexibility from sufficient external static pressure allows authentic duct air conditioning with an elegant interior layout.

High static pressure of 200 Pa or higher

The additional external static pressure capacity provides flexibility for duct extension, branching and air outlet configuration.

PEFY-P VMH-E		P40	P50	P63	P71	P80	P100	P125	P140	P200	P250
External static pressure (Pa)	220V	50/100/200								——	
	230/240V	100/150/200								——	
	380V	——								110/220	
	400/415V	——								130/260	

PEFY-P VMHS-E	P200	P250
External static pressure (Pa)	<50> – <100> – 150 – <200> – <250>*	

*The rated external static pressure is shown without < >.
The factory setting is the rated value.

Reduced noise thanks to the use of newly designed centrifugal fan

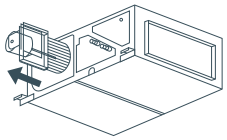
Sound pressure level table (Standard static pressure 220V)

dB(A)

Sound pressure Level	Capacity		P40	P50	P63	P71	P80	P100	P125	P140
	Fan Speed	High	34	34	38	39	41	42	42	42
		Low	27	27	32	32	35	34	34	34

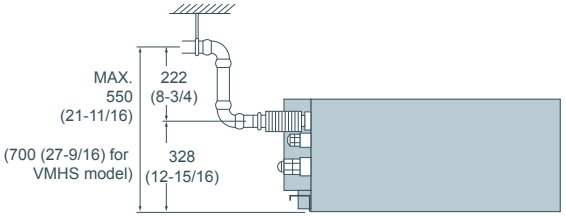
One-side maintenance

All maintenance to the unit, including fan inspection and fan motor removal, can be conducted from the inspection opening on one side.
(VMH model only)



Drain pump (option) ensures up to 550mm (21-11/16in.) for VMH model / 700mm (27-9/16in.) for VMHS model of lift

The introduction of an upper drain pump allows the drain connection to be raised as high as 550mm(21-11/16in.) for VMH model/700mm (27-9/16in.) for VMHS model, allowing more freedom in piping layout design and reducing horizontal piping requirements.



mm (in.)

▸Specifications

				PEFY-P40VMH-E	PEFY-P50VMH-E	PEFY-P63VMH-E	PEFY-P71VMH-E	PEFY-P80VMH-E	PEFY-P100VMH-E	PEFY-P125VMH-E	PEFY-P140VMH-E
Power source				1-phase 220-240V 50Hz / 1-phase 220-240V 60Hz							
Cooling capacity		*1	kW	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0
		*1	BTU/h	15,400	19,100	24,200	27,300	30,700	38,200	47,800	54,600
Heating capacity		*1	kW	5.0	6.3	8.0	9.0	10.0	12.5	16.0	18.0
		*1	BTU/h	17,100	21,500	27,300	30,700	34,100	42,700	54,600	61,400
Power consumption	Cooling		kW	0.19 / 0.23		0.24 / 0.30	0.26 / 0.33	0.32 / 0.40	0.48 / 0.58		0.48 / 0.59
	Heating		kW	0.19 / 0.23		0.24 / 0.30	0.26 / 0.33	0.32 / 0.40	0.48 / 0.58		0.48 / 0.59
Current	Cooling		A	0.88 / 1.06		1.12 / 1.38	1.20 / 1.51	1.47 / 1.83	2.34 / 2.66		2.35 / 2.70
	Heating		A	0.88 / 1.06		1.12 / 1.38	1.20 / 1.51	1.47 / 1.83	2.34 / 2.66		2.35 / 2.70
External finish				Galvanized							
Dimension H x W x D			mm	380 x 750 x 900			380 x 1,000 x 900		380 x 1,200 x 900		
			in.	15 x 29-9/16 x 35-7/16			15 x 39-3/8 x 35-7/16		15 x 47-1/4 x 35-7/16		
Net weight			kg(lbs.)	44 (98)	45 (100)		50 (111)		70 (155)		
Heat exchanger				Cross fin (Aluminum plate fin and copper tube)							
Fan	Type x Quantity			Sirocco fan x 1					Sirocco fan x 2		
	Airflow rate (Lo-Hi)		m^3/min	10.0-14.0		13.5-19.0	15.5-22.0	18.0-25.0	26.5-38.0		28.0-40.0
			L/s	167-233		225-317	258-367	300-417	442-633		467-667
			cfm	353-494		477-671	547-777	636-883	936-1342		989-1413
	External static pressure *2	220V	Pa	50 · 100 · 200							
		230,240V	Pa	100 · 150 · 200							
Motor	Type			1-phase induction motor							
	Output	*3	kW	0.08		0.12	0.14	0.18	0.26		
Air filter (option)				Synthethic fiber unwoven cloth filter (long life)							
Refrigerant pipe diameter	Gas (Flare)		mm(in.)	ø12.7 (ø1/2)			ø15.88 (ø5/8)				
	Liquid (Flare)		mm(in.)	ø6.35 (ø1/4)			ø9.52 (ø3/8)				
Field drain pipe diameter			mm(in.)	O.D. 32 (1-1/4)							
Sound pressure level (Lo-Hi) *6	220V		dB(A)	27-34		32-38	32-39	35-41	34-42		
	230,240V		dB(A)	31-37		36-41	35-41	38-43	38-44		

				PEFY-P200VMHS-E	PEFY-P250VMHS-E
Power source				1-phase 220-240V 50Hz / 1-phase 220-240V 60Hz	
Cooling capacity		*1	kW	22.4	28.0
		*1	BTU/h	76,400	95,500
Heating capacity		*1	kW	25.0	31.5
		*1	BTU/h	85,300	107,500
Power consumption	Cooling		kW	0.63 *7	0.82 *7
	Heating		kW	0.63 *7	0.82 *7
Current	Cooling	380-415V	A	—	—
		220-230-240V	A	3.47-3.32-3.18 *7	4.72-4.43-4.14 *7
	Heating	380-415V	A	—	—
		220-230-240V	A	3.47-3.32-3.18 *7	4.72-4.43-4.14 *7
External finish				Galvanized steel plate	
Dimension H x W x D			mm	470 x 1,250 x 1,120	
			in.	18-9/16 x 49-1/4 x 44-1/8	
Net weight			kg(lbs.)	97 (214)	100 (221)
Heat exchanger				Cross fin (Aluminum plate fin and copper tube)	
Fan	Type x Quantity			Sirocco fan x 2	
	Airflow rate		m^3/min	—	—
			L/s	—	—
			cfm	—	—
		Lo-Mid-Hi	m^3/min	50.0-61.0-72.0	58.0-71.0-84.0
			L/s	833-1017-1200	967-1183-1400
			cfm	1766-2154-2542	2048-2507-2966
	External static pressure	380V	Pa	—	
		400,415V	Pa	—	
			Pa	<50>-<100>-150-<200>-<250> *8	
			mmH_2O	<5.1>-<10.2>-15.3-<20.4>-<25.5> *8	
Motor	Type			DC motor	
	Output		kW	0.87	0.87
Air filter(option)				Synthethic fiber unwoven cloth filter (long life filter) and filter box are recommended.	
Refrigerant pipe diameter	Gas (Brazed)		mm(in.)	ø19.05 (ø3/4)	ø22.2 (ø7/8)
	Liquid (Brazed)		mm(in.)	ø9.52 (ø3/8)	
Field drain pipe diameter			mm(in.)	O.D. 32 (1-1/4)	
Sound pressure level	380V		dB(A)	—	—
	400,415V		dB(A)	—	—
	Lo-Mid-Hi		dB(A)	36-39-43 *9	39-42-46 *9

Notes:

*1 Cooling/heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoo r: 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB, Outdoor : 7°C(45°F)DB/6°C(43°F)WB

*2 The external static pressure is set to 100Pa (at 220V) /150Pa (at 230, 240V) at factory shipment.

*3 The value are that at 240V.

*4 The external static pressure is set to 220Pa (at 380V) /260Pa (at 400, 415V) at factory shipment.

*5 The value are that at 415V.

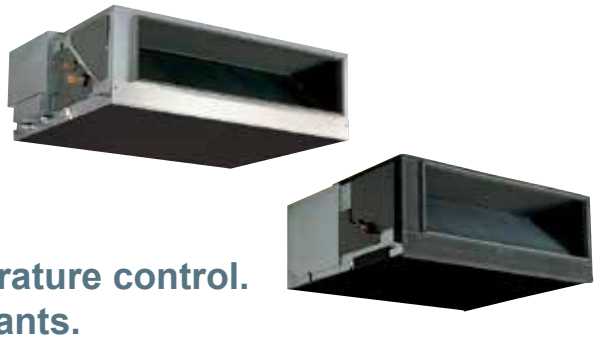
*6 It is measured in anechoic room.

*7 The values are measured at the rated external static pressure.

*8 The rated external static pressure is shown without < >.
The factory setting is the rated value.

*9 It is measured at the rated external static pressure in anechoic room.

INDOOR UNIT
Fresh Air Intake Type



PEFY-P VMH-E-F

Fresh Air Intake

Fresh Air can be taken in with temperature control.
Ideal for Offices, Stores and Restaurants.

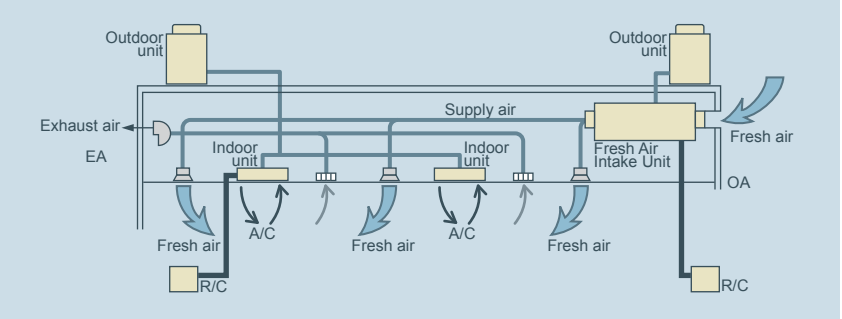
The Fresh Air intake indoor unit can be installed in any place.

The Fresh Air intake indoor unit can take fresh outdoor air into any building in any place at any time.

Office, Lobby, Workshop, Rest room, Nursing home, Cafeterias, Kitchen in restaurant

*** Limits of capacity connectable to outdoor unit**
Max. 110% of outdoor unit capacity, excepting heating at outdoor temperature of less than -5°C(23°F) (100%).

Example



< Note>
Fan remains in operation during Thermo-OFF. Using this model with other types of indoor units is recommended to prevent cold drafts caused by intaken fresh air.

< Note>
Please contact your local sales engineer for specific installation and application information relating to this product.

▸Specifications

				PEFY-P80VMH-E-F	PEFY-P140VMH-E-F
Power source				1-phase 220-240V 50Hz / 1-phase 208-230V 60Hz	
Cooling capacity		*1	kW	9.0	16.0
		*1	BTU/h	30,700	54,600
Heating capacity		*1	kW	8.5	15.1
		*1	BTU/h	29,000	51,500
Power consumption	Cooling		kW	0.16 / 0.21	0.29 / 0.33
	Heating		kW	0.16 / 0.21	0.29 / 0.33
Current	Cooling		A	0.67 / 0.91	1.24 / 1.48
	Heating		A	0.67 / 0.91	1.24 / 1.48
External finish				Galvanized	
Dimension H x W x D			mm(in.)	380 x 1000 x 900 (15 x 39-3/8 x 35-7/16)	380 x 1200 x 900 (15 x 47-1/4 x 35-7/16)
Net weight			kg(lbs.)	50 (111)	70 (155)
Heat exchanger				Cross fin (Aluminum plate fin and copper tube)	
Fan	Type x Quautity			Sirocco fan x 1	Sirocco fan x 2
	Airflow rate		m^3/min	9.0	18.0
			L/s	150	300
			cfm	318	636
	External static pressure (Lo-Mid-Hi)	208V	Pa	35 - 85 - 170	35 - 85 - 170
		220V	Pa	40 - 115 - 190	50 - 115 - 190
		230V	Pa	50 - 130 - 210	60 - 130 - 220
		240V	Pa	80 - 170 - 220	100 - 170 - 240
Motor	Type			1-phase induction motor	
	Output		kW	0.09 (at 220V)	0.14 (at 220V)
Air filter (option)				Synthetic fiber unwoven cloth filter (long life)	
Refrigerant pipe diameter	Gas (Flare)		mm(in.)	ø15.88 (ø5/8)	
	Liquid (Flare)		mm(in.)	ø9.52 (ø3/8)	
Field drain pipe diameter			mm(in.)	O.D.32 (1-1/4)	
Sound pressure level (Lo-Mid-Hi) *2	208, 220V		dB(A)	27 - 38 - 43	28 - 38 - 43
	230, 240V		dB(A)	33 - 43 - 45	34 - 43 - 45

				PEFY-P200VMH-E-F	PEFY-P250 VMH-E-F
Power source				3-phase 380-415V 50Hz / 3N~ 380-415V 60Hz	
Cooling capacity			kW	22.4	28.0
			BTU/h	76,400	95,500
Heating capacity			kW	21.2	26.5
			BTU/h	72,300	90,400
Power consumption	Cooling		kW	0.34 / 0.42	0.39 / 0.50
	Heating		kW	0.34 / 0.42	0.39 / 0.50
Current	Cooling		A	0.58 / 0.74	0.68 / 0.86
	Heating		A	0.58 / 0.74	0.68 / 0.86
External finish				Galvanized	
Dimension H x W x D			mm(in.)	470 x 1250 x 1120 (18-9/16 x 49-1/4 x 44-1/8)	
Net weight			kg(lbs.)	100 (221)	
Heat exchanger				Cross fin (Aluminum plate fin and copper tube)	
Fan	Type x Quautity			Sirocco fan x 2	
	Airflow rate		m^3/min	28	35
			L/s	467	583
			cfm	989	1236
	External static pressure	380V	Pa	140 / 200	110 / 190
		400V	Pa	150 / 210	120 / 200
		415V	Pa	160 / 220	130 / 210
Motor	Type			3-phase induction motor	
	Output		kW	0.20	0.23
Air filter (option)				Synthetic fiber unmoven cloth filter (long life type)	
Refrigerant pipe diameter	Gas (Flare)		mm(in.)	ø19.05 (ø3/4)	ø22.2 (ø7/8)
	Liquid (Flare)		mm(in.)	ø9.52 (ø3/8)	
Field drain pipe diameter			mm(in.)	O.D.32 (1-1/4)	
Sound pressure level *2	380V		dB(A)	39 / 42	40 / 44
	400V		dB(A)	40 / 43	40 / 45
	415V		dB(A)	40 / 44	41 / 46

Notes:

1. The cooling and heating capacites are the maximum capacites that were obitained by operating in the above air conditions and with a refrigerant pipe of about 7.5m.
2. The actual capacity characteristics vary with the combination of indoor and outdoor units. See the technical infomation.
3. The operating noise is the data that was obitained by measuring it 1.5m from the the bottom of the unit in an anechoic room. (Noise meter A-scale value)
4. The figure of Electrical characteristic indicates at 240V 50Hz/230V60Hz (PEFY-P80, 140VHM-E-F type), at 220Pa setting at 415V (PEFY-P200, 250VMH-E-F type).
5. When the 100% fresh air indoor units are connected, the maximum connectable indoor units to 1 outdoor unit are as follows

Heat pump models	Cooling only
110%(100% in case of heating below-5°C(23°F))	110%

6. Operational temp range is (Cooling : from 21°C(70°F)DB/15.5°C(60°F)WB to 43°C(109°F)DB/35°C(95°F)WB
   Heating : from -10°C(14°F)DB to 20°C(68°F)DB)
   * Thermo off(Fan) operation automatically starts either when temperature is lower than 21°C(70°F)DB in cooling mode or when the temperature exceeds 20°C(68°F)DB in heating mode.
7. As the room temp in sensed by the thermo in the remote controller or the one in the room, be sure to use either remote controller or room thermo.
8. Autochangeover function or Dry mode is NOT available. Fan mode operation during the thermo off in Cooling/Heating mode.
9. In any case, the air flow rate should be kept lower than 110% of the above chart. Please see "Fan curves" for the details.
10. When this unit is used as sole A/C system, be careful about the dew in air outlet grilles in cooling mode.
11. Un-conditioned outdoor air such as humid air or cold air blows to the indoor during thermo off operation.
    Please be careful when positioning indoor unit air outlet grilles, ie take the necessary precautions for cold air, and also insulate rooms for dew condensation prevention as required.
12. Air filter must be installed in the air intake side. The filter should be attached where easy maintenance in possible in case of usage of fild supply filters.
13. Long life cannot be used with Hi-efficiency filter together (PEFY-P80 · 140VMH-E-F type).

INDOOR UNIT
Under Ceiling Unit

PCFY-P VKM-E

Designed for ultra-quiet operation and easy maintenance, providing exceptional comfort.

Extra slim, extra stylish

Sleek and slim with stylishly curved lines, the PCFY series blends right into any interior. It also features a single air outlet which allows the auto vane to act as a shutter when the unit is turned off.

Auto vane distributes air evenly

The auto vane swings up and down automatically to distribute air more evenly to every corner of the room.

Long life filter as standard

Long life filter is equipped as standard enabling up to 2,500 hours of operation (office use) without maintenance.

Keeps airflow at optimum level according to ceiling height

The most suitable airflow can be selected for ceilings up to 4.2m high, enhancing air-conditioning efficiency and comfort. (P100/P125)

	Standard	High ceiling
Ceiling height	3.0(9-13/16)	4.2(13-3/4)

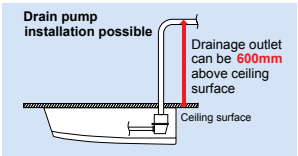
m (ft)

Greatly simplified installation

The direct suspension system eliminates the task of removing the attachment fixture from the main unit, greatly shortening installation time.

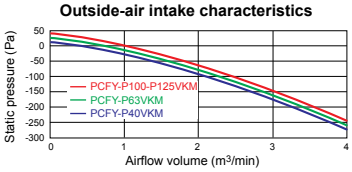
Drain pump option available with all models

The pumping height of the optional drain pump has been increased from 400 mm to 600 mm, expanding flexibility in choosing unit location during installation work.



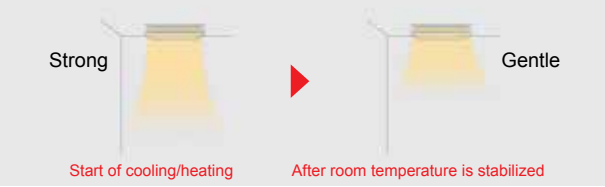
Outside-air intake

Units are equipped with a knock-out hole that enables the induction of fresh outside-air.



Equipped with automatic air-speed adjustment

In addition to the conventional 4-speed setting, units are now equipped with an automatic air-speed adjustment mode. This setting automatically adjusts the air-speed to conditions that match the room environment. At the start of heating/cooling operation, the airflow is set to high-speed to quickly heat/cool the room. When the room temperature reaches the desired setting, the airflow speed is decreased automatically for stable comfortable heating/cooling operation.



▸Specifications

			PCFY-P40VKM-E	PCFY-P63VKM-E	PCFY-P100VKM-E	PCFY-P125VKM-E
Power source			1-phase 220-240V 50Hz / 1-phase 220V 60Hz			
Cooling capacity	*1	kW	4.5	7.1	11.2	14.0
	*1	BTU/h	15,400	24,200	38,200	47,800
Heating capacity	*1	kW	5.0	8.0	12.5	16.0
	*1	BTU/h	17,100	27,300	42,700	54,600
Power consumption	Cooling	kW	0.04	0.05	0.09	0.11
	Heating	kW	0.04	0.05	0.09	0.11
Current	Cooling	A	0.28	0.33	0.65	0.76
	Heating	A	0.28	0.33	0.65	0.76
External finish(Munsell No.)			6.4Y 8.9/ 0.4			
Dimension H x W x D		mm	230 x 960 x 680	230 x 1,280 x 680	230 x 1,600 x 680	
		in.	9-1/16 x 37-13/16 x 26-3/4	9-1/16 x 50-3/8 x 26-3/4	9-1/16 x 63 x 26-3/4	
Net weight		kg(lbs.)	24(53)	32 (71)	36 (79)	38 (84)
Heat exchanger			Cross fin (Aluminum fin and copper tube)			
Fan	Type x Quantity		Sirocco fan x 2	Sirocco fan x 3	Sirocco fan x 4	
	Airflow rate *2 (Lo-Mid2-Mid1-Hi)	m^3/min	10-11-12-13	14-15-16-18	21-24-26-28	21-24-27-31
		L/s	167-183-200-217	233-250-267-300	350-400-433-467	350-400-450-517
		cfm	353-388-424-459	494-530-565-636	742-847-918-989	742-847-953-1,095
	External static pressure	Pa	0			
Motor	Type		DC motor			
	Output	kW	0.090	0.095	0.160	
Air filter			PP Honeycomb (long life)			
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (ø1/2)	ø15.88 (ø5/8)	ø15.88 (ø5/8) / ø19.05 (ø3/4) (Compatible)	
	Liquid (Flare)	mm(in.)	ø6.35 (ø1/4)	ø9.52 (ø3/8)		
Field drain pipe diameter		mm(in.)	O.D. 26 (1)			
Sound pressure level (Lo-Mid2-Mid1-Hi) *2 *3		dB(A)	29-32-34-36	31-33-35-37	36-38-41-43	36-39-42-44

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(80.6°F)DB/19°C(66.2°F)WB,Outdoor 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB,Outdoor 7°C(44.6°F)DB/6°C(42.8°F)WB

*2 Airflw rate/Sound pressure level are shown in (low-middle 2-middle 1-high).

*3 It is measured in anechoic room.

INDOOR UNIT
Wall Mounted Type

PKFY-P VBM-E
PKFY-P VHM-E
PKFY-P VKM-E

PKFY-P VBM

PKFY-P VHM

PKFY-P VKM

Elegant design and compact dimensions ideal for offices, stores and residential uses.

Capacity range

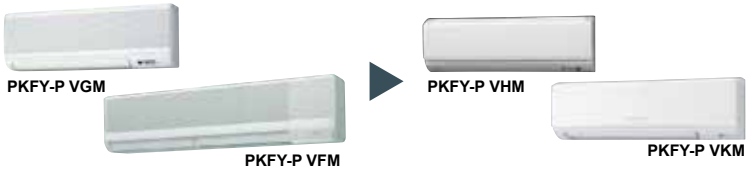
Capacity	P15	P20	P25	P32	P40	P50	P63	P100
VBM	●	●	●					
VHM				●	●	●		
VKM							●	●

4-way piping provides more flexibility in selecting installation sites

All piping including drainage can be connected from the rear, right, base, and left of the unit, providing much greater flexibility in piping and selecting installation site.

Flat panel & pure white finish

All models have changed from the grill design, adopting the flat panel layout.
Pursuing a design that harmonises with virtually any interior, the unit color has been changed from white to pure white.



Built-in signal receiver

PKFY-P VBM features

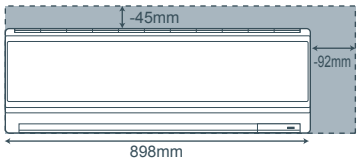
Compact profile

Quiet operation

PKFY-P VHM features

Compact size of 898mm

Width size reduced to match small size buildings and offices.



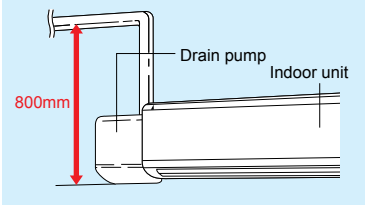
Comparison with PKFY-P VGM-E

Light unit

Approx. 3kg reduced from conventional model (P32-50). Easier installation.

Drain pump (option)

The optional drain pump allows the drain connection to be raised as high as 800mm, allowing more freedom in piping layout design.



▸Specifications

				PKFY-P15VBM-E	PKFY-P20VBM-E	PKFY-P25VBM-E	PKFY-P32VHM-E	PKFY-P40VHM-E	PKFY-P50VHM-E
Power source				1-phase 220-240V 50Hz / 1-phase 220V 60Hz					
Cooling capacity		*1	kW	1.7	2.2	2.8	3.6	4.5	5.6
		*1	BTU/h	5,800	7,500	9,600	12,300	15,400	19,100
Heating capacity		*1	kW	1.9	2.5	3.2	4.0	5.0	6.3
		*1	BTU/h	6,500	8,500	10,900	13,600	17,100	21,500
Power consumption	Cooling	*4	kW	0.04			0.04		
	Heating		kW	0.04			0.03		
Current	Cooling	*4	A	0.20			0.40		
	Heating		A	0.20			0.30		
External finish(Munsell No.)				Plastic (1.0Y 9.2/0.2)			Plastic (1.0Y 9.2/0.2)		
Dimension H x W x D			mm(in.)	295 x 815 x 225 (11-5/8 x 32-1/8 x 8-7/8)			295 x 898 x 249(11-5/8 x 35-3/8 x 9-13/16)		
Net weight			kg(lbs.)	10 (23)			13(29)		
Heat exchanger				Cross fin (Aluminum fin and copper tube)					
Fan	Type x Quantity			Line flow fan x 1					
	Airflow rate (Lo-Mid2-Mid1-Hi)	*2	m^3/min	4.9-5.0-5.2-5.3	4.9-5.2-5.6-5.9		9-10-11	9-10.5-11.5	9-10.5-12
			L/s	82-83-87-88	82-87-93-98		150-167-183	150-175-192	150-175-200
			cfm	173-177-184-187	173-184-198-208		318-353-388	318-371-406	318-371-424
	External static pressure		Pa	0					
Motor	Type			1-phase induction motor			DC motor		
	Output		kW	0.017			0.030		
Air filter				PP Honeycomb					
Refrigerant pipe diameter	Gas (Flare)		mm(in.)	ø12.7 (ø1/2)					ø12.7 (ø1/2) / ø15.88 (ø5/8) (Compatible)
	Liquid (Flare)		mm(in.)	ø6.35 (ø1/4)					ø6.35 (ø1/4) / ø9.52 (ø3/8) (Compatible)
Field drain pipe diameter			mm(in.)	I.D.16 (5/8)					
Sound pressure level (Lo-Mid2-Mid1-Hi)		*2 *3	dB(A)	29-31-32-33	29-31-34-36		34-37-41	34-38-41	34-39-43

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB,Outdoor 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB,Outdoor 7°C(45°F)DB/6°C(43°F)WB

*2 Airflow rate/Sound pressure level are in (low-middle2-middle1-high).

*3 It is measured in anechoic room.

*4 Electrical characteristic of cooling are included optional drain-pump.

				PKFY-P63VKM-E	PKFY-P100VKM-E
Power source				1-phase 220-230-240V 50Hz / 1-phase 220V 60Hz	
Cooling capacity		*1	kW	7.1	11.2
		*1	BTU/h	24,200	38,200
Heating capacity		*1	kW	8.0	12.5
		*1	BTU/h	27,300	42,600
Power consumption	Cooling	*4	kW	0.05	0.08
	Heating		kW	0.04	0.07
Current	Cooling	*4	A	0.37	0.58
	Heating		A	0.30	0.51
External finish(Munsell No.)				Plastic (1.0Y 9.2/0.2)	
Dimension H x W x D			mm(in.)	365 x 1,170 x 295 (14-3/8 x 46-1/16 x 11-5/8)	
Net weight			kg(lbs.)	21 (46)	
Heat exchanger				Cross fin (Aluminum fin and copper tube)	
Fan	Type x Quantity			Line flow fan x 1	
	Airflow rate (Lo-Hi)	*2	m^3/min	16-20	20-26
			L/s	267-333	333-433
			cfm	565-706	706-918
	External static pressure		Pa	0	
Motor	Type			DC motor	
	Output		kW	0.056	
Air filter				PP Honeycomb	
Refrigerant pipe diameter	Gas (Flare)		mm(in.)	ø15.88 (ø5/8)	ø15.88 (ø5/8) / ø19.05 (ø3/4) (Compatible)
	Liquid (Flare)		mm(in.)	ø9.52 (ø3/8)	
Field drain pipe diameter			mm(in.)	I.D. 16(5/8)	
Sound pressure level (Lo-Hi)		*2 *3	dB(A)	39-45	41-49

Notes:

*1 Cooling/heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoor : 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB, Outdoor : 7°C(45°F)DB/6°C(43°F)WB

*2 Airflow rate/Sound pressure level are in (low-high).

*3 It is measured in anechoic room.

*4 Electrical characteristic of cooling are included optional drain-pump.

INDOOR UNIT
Wall mounted type

MSZ-EF Designer Series
and PAC-LV11M-J External LEV Kit*

An exceptional combination of energy efficiency and award winning design, the Designer Series will appeal to those with even the most discerning style.

Three Colours Available

The Designer Series has a slim line profile, with silver-bevelled edges and a flat panel façade. Available in matte silver, glossy black or classic white, the Designer Series will suit any application. The Designer Series is an unobtrusive, efficient, and safe heating source which allows you to make the most of valuable floor space.

Superior Filtration

Equipped with a nano-platinum filter which is both antibacterial and deodorising, the filter ensures increased dust catchment and superior air cleaning.

▸Specifications

			MSZ-EF25VEW/B/S	MSZ-EF35VEW/B/S	MSZ-EF42VEW/B/S	MSZ-EF50VEW/B/S
Power source			Single phase 230 V, 50 Hz			
Cooling Capacity		kW	2.5	3.5	4.2	5
		BTU/h	8,530	11,942	14,330	17,060
Heating Capacity		kW	3.2	4	5.4	5.8
		BTU/h	10,918	13,648	18,425	19,790
Power Consumption	Cooling	kW	0.014			0.018
	Heating	kW	0.027	0.031		0.034
Current	Cooling	A	0.14	0.14	0.14	0.18
	Heating	A	0.26	0.3	0.3	0.32
External finish			Classic White, Matte Silver, Glossy Black			
Dimensions (WxDxH)		[mm]	895 x 195 x 299			
Net weight		[kg]	11.5			
Heat exchanger			Cross fin (Aluminum fin and copper tube)			
Fan	Type x Quantity		Line flow fan x 1			
	Airflow rate Cooling (Lo-SHi)	m3/min	4.6-6.3-8.15-10.5		6.6-7.7-8.9-10.3	6.8-7.9-9.3-11
	Airflow rate Heating(Lo-SHi)	m3/min	4.6-6.2-8.9-11.9	4.6-6.2-8.9-12.7	6.3-7.8-9.9-12.7	7.3-9-11.1-13.7
	External static pressure	Pa	N/A			
Motor	Type		RC0J40 - DC motor			
	Output (C/H)	kW	0.014/0.027	0.014/0.031	0.014/0.031	0.018/0.034
Air filter			Nano Platinum			
Refrigerant pipe diameter	Gas (flare)	mm	9.52			12.7
	Liquid (flare)	mm	6.35			
Field drain pipe diameter			I.D. 15mm			
"Sound pressure level (Lo-Mid-Hi-Shi)"		dBA	23-29-36-42	24-29-36-42	31-35-39-42	33-36-40-43

*A PAC-LV11M-J is required for each MSZ-EF indoor unit installed.

CITY MULTI
External LEV Kit for Designer Series High Walls

PAC-LV11M-J

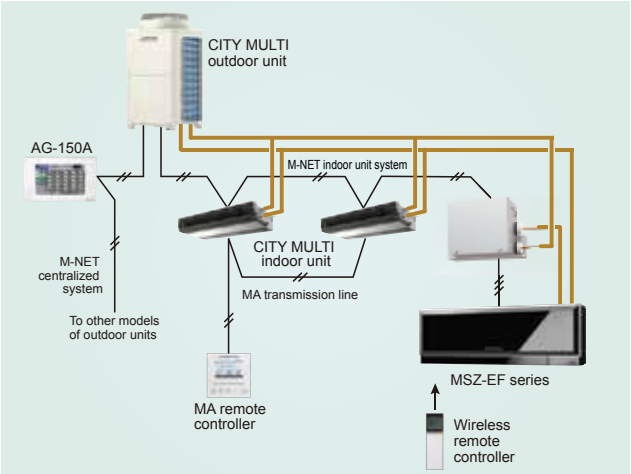
Feature

- Connection between CITY MULTI and Designer Series high walls
- Wider indoor unit selection options
- Controllable from MELANS controller
- Compact size 183 x 355 x 142 mm (H x W x D)
- Maximum distance of 15 m between Connection KIT and RAC Indoor unit
- No need for drain pipe.

Specifications

MODEL			PAC-LV11M-J
Power source			Single / 220-240V / 50Hz
Connectable number of indoor unit			1
External finish			Galvanized steel sheet (No external finish)
External dimension H x W x D		mm	183 x 355 x 142
Net weight		kg	3.5
Refrigerant piping diameter	Liquid pipe	mm	6.35 Brazed
	Gas pipe	mm	–
Wiring	To Outdoor unit		2-core shield cable

System Structure



*Refer to the relevant manuals for detailed information and restrictions.

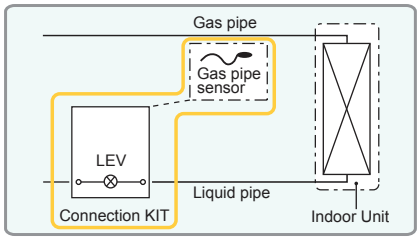
Connectable Models

Outdoor Unit
PUHY Series
PURY Series

Indoor Unit
MSZ-EF Series

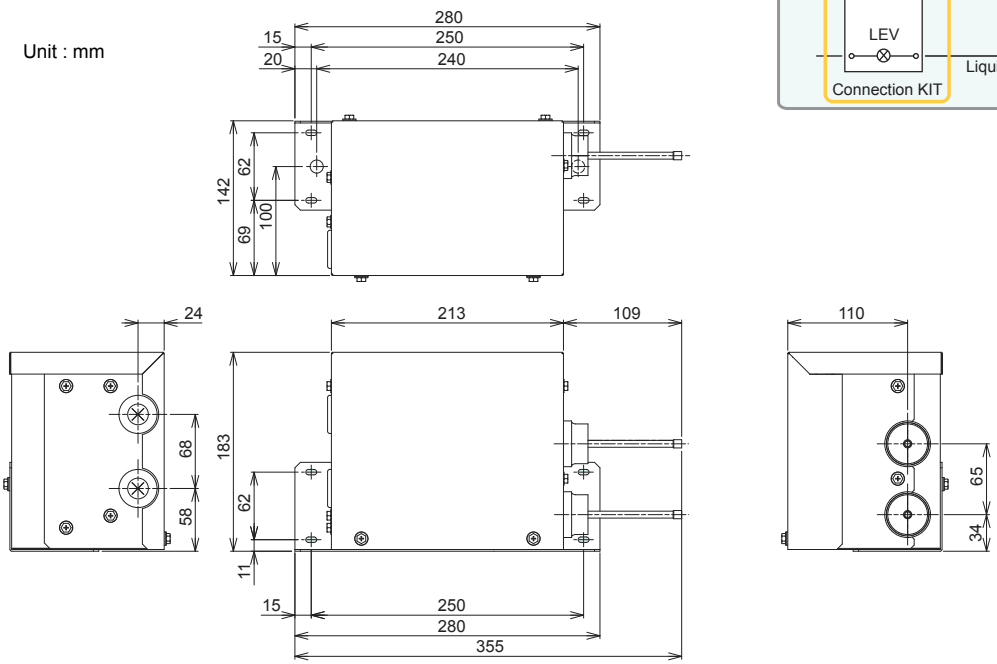
Refrigerant Circuit Diagrams

The gas pipe sensor (packaged, field installed) and the built-in sensor on the RAC units allow for optimum control of the LEV.



External Dimensions

Unit : mm



INDOOR UNIT
Floor console

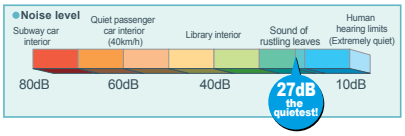
PFFY-P VKM-E2

For living rooms, bedrooms, or offices where a sophisticated design is required. The latest Mitsubishi Electric innovation – floor-standing air-conditioners sophisticated in design, rich in function.

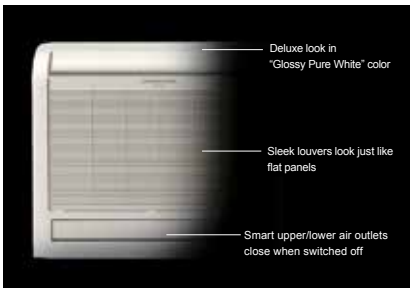
Quiet operation

Mitsubishi Electric air conditioners have always been some of the quietest models available in the market. Our new floorstanding models are no exception.
It can create a quiet and comfortable space where the occupants would not even recognize the existence of air conditioner operation.

*2.5kw class

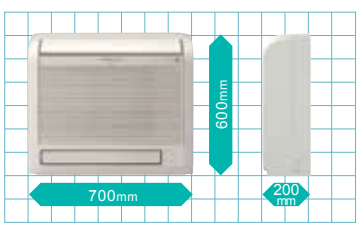


Sophisticated Design



From Mitsubishi Electric, an innovative new floor-standing air-conditioner. Our pleasing mix of streamlined form and diversified function. Engineered to keep walls free, allowing for comfortable cooling in summer and toasty heating in winter.
The “Glossy Pure White” colour ensures a deluxe look, the perfect match for any room. Both upper and lower air outlets remain closed when switched OFF, for a smart and striking look.
A superb new air-conditioner from Mitsubishi Electric, providing a handsome fit for your own distinctive interior.

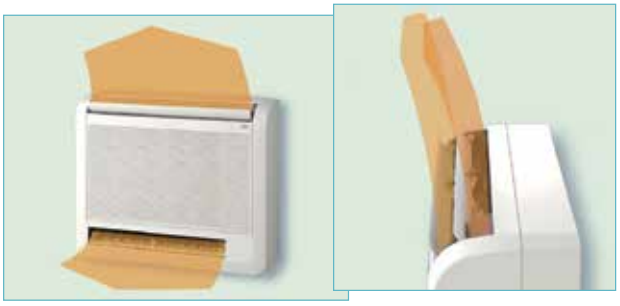
Slim but Mighty



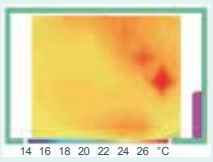
The units body is slim and compact. An ideal size for living rooms, bedrooms, and more.
The removable and washable front panel makes cleaning a snap. Easy and regular cleaning allows your air-conditioner stay beautiful while keeping its energy-efficient operation always possible.

Optimum Air Distribution

Comfortable room temperatures are realized by the optimum, powerful and efficient air distribution through upper and lower air outlets. The upper vane angle is remote controllable, with 5 air flow direction levels (+Swing and Auto modes) and 4 wind power levels (+Auto mode).
By setting the vane angle almost vertical, direct air flow can be avoided for increased comfort.



The air from both upper and lower air outlets is optimally controlled and distributed evenly to every corner of the room. In heating mode, the warm air is smartly controlled to stay at the floor level: Your feet do not feel chilled any more!



▸Specifications

			PFFY-P20VKM-E2	PFFY-P25VKM-E2	PFFY-P32VKM-E2	PFFY-P40VKM-E2
Power source			1-phase 220-240V 50Hz			
Cooling capacity	*1	kW	2.2	2.8	3.6	4.5
	*1	BTU/h	7,500	9,600	12,300	15,400
Heating capacity	*1	kW	2.5	3.2	4.0	5.0
	*1	BTU/h	8,500	10,900	13,600	17,100
Power consumption	Cooling	kW	0.025	0.025	0.025	0.028
	Heating	kW	0.025	0.025	0.025	0.028
Current	Cooling	A	0.20	0.20	0.20	0.24
	Heating	A	0.20	0.20	0.20	0.24
External finish			Plastic (Pure white)			
Dimension H x W x D		mm	600 x 700 x 200			
		in.	23-5/8 x 27-9/16 x 7-7/8			
Net weight		kg(lbs.)	15 (34)			
Heat exchanger			Cross fin (Alminium plate fin and copper tube)			
Fan	Type x Quantity		Line flow fan x 2			
	Airflow rate (Lo-Mid-Hi-SHi)	m^3/min	5.9-6.8-7.6-8.7	6.1-7.0-8.0-9.1	6.1-7.0-8.0-9.1	8.0-9.0-9.5-10.7
	External static pressure	Pa	0			
Motor	Type		DC motor			
	Output	kW	0.03 x 2			
Air filter			PP honeycomb fabric (Catechin Filter)			
Refrigerant pipe diameter	Gas(Flare)	mm(in.)	ø12.7 (ø1/2)			
	Liquid(Flare)	mm(in.)	ø6.35 (ø1/4)			
Field drain pipe diameter			I.D.16 (5/8)			
Sound pressure level (Lo-Mid-Hi-SHi) *2		dB(A)	27-31-34-37	28-32-35-38	28-32-35-38	35-38-42-44

Notes:

*1 Cooling/heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoor : 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB, Outdoor : 7°C(45°F)DB/6°C(43°F)WB

*2 Airflow rate/Sound pressure level are in (low-middle-high-shigh).

*3 It is measured in anechoic room.

INDOOR UNIT
Floor standing exposed

PFFY-P VLEM-E

Floor mounted exposed type, effective for perimeter installation.

Standardized design with mild lines.
Supports various types of spaces from office buildings and shop buildings to hospitals.
Water vapor permeable film humidifier can be installed.
Remote controller can be installed onto the main unit.

Compact unit for easy air conditioning in perimeter zone.

The compact body of 220mm(8-11/16in.) in depth can be easily installed in the perimeter zone for effective air conditioning in the perimeter zone.

▸Specifications

			PFFY-P20VLEM-E	PFFY-P25VLEM-E	PFFY-P32VLEM-E	PFFY-P40VLEM-E	PFFY-P50VLEM-E	PFFY-P63VLEM-E
Power source			1-phase 220-240V 50Hz / 1-phase 208-230V 60Hz					
Cooling capacity	*1	kW	2.2	2.8	3.6	4.5	5.6	7.1
	*1	BTU/h	7,500	9,600	12,300	15,400	19,100	24,200
Heating capacity	*1	kW	2.5	3.2	4.0	5.0	6.3	8.0
	*1	BTU/h	8,500	10,900	13,600	17,100	21,500	27,300
Power consumption	Cooling	kW	0.04 / 0.06		0.06 / 0.07	0.065 / 0.075	0.085 / 0.09	0.1 / 0.11
	Heating	kW	0.04 / 0.06		0.06 / 0.07	0.065 / 0.075	0.085 / 0.09	0.1 / 0.11
Current	Cooling	A	0.19 / 0.25		0.29 / 0.30	0.32 / 0.33	0.40 / 0.41	0.46 / 0.47
	Heating	A	0.19 / 0.25		0.29 / 0.30	0.32 / 0.33	0.40 / 0.41	0.46 / 0.47
External finish(Munsell No.)			Acrylic paint (5Y 8/1)					
Dimension H x W x D		mm	630 x 1,050 x 220		630 x 1,170 x 220		630 x 1,410 x 220	
		in.	24-13/16 x 41-3/8 x 8-11/16		24-13/16 x 46-1/8 x 8-11/16		24-13/16 x 55-9/16 x 8-11/16	
Net weight		kg(lbs.)	23 (51)		25 (56)	26 (58)	30 (67)	32 (71)
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)					
Fan	Type x Quantity		Sirocco fan x 1		Sirocco fan x 2			
	Airflow rate (Lo-Hi) *2	m^3/min	5.5-6.5		7.0-9.0	9.0-11.0	12.0-14.0	12.0-15.5
		L/s	92-108		117-150	150-183	200-233	200-258
		cfm	194-230		247-318	318-388	424-494	424-547
	External static pressure	Pa	0					
Motor	Type		1-phase induction motor					
	Output	kW	0.015		0.018	0.030	0.035	0.050
Air filter			PP Honeycomb fabric (washable)					
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (ø1/2)					ø15.88 (ø5/8)
	Liquid (Flare)	mm(in.)	ø6.35 (ø1/4)					ø9.52 (ø3/8)
Field drain pipe diameter		mm(in.)	I.D.26 (1) <Accessory hose O.D.27 (1-3/32) (top end :20 (13/16))>					
Sound pressure level (Lo-Hi) *2 *3 *4		dB(A)	34-40		35-40	38-43		40-46

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB,Outdoor 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB

*2 Air flow rate/Sound pressure level are in (Low-High)

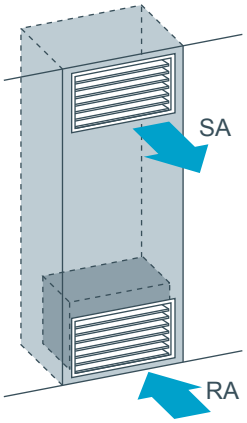
*3 Measured point : 1m x 1m, Power supply : AC240V/50Hz
· 1dB(A) lower at AC230V/50Hz
· 2dB(A) lower at AC220V/50Hz
· 3dB(A) lower at 1.5m x 1.5m point

*4 It is measured in anechoic room.

INDOOR UNIT
Floor mounted concealed type

PFFY-P VLRM-E
PFFY-P VLRMM-E

Neatly installed with pericover concealed.
Easy installation in perimeter zone.



installation image (PFFY-P VLRMM-E)

Compact unit for easy air conditioning in perimeter zone.

The body is concealed in the pericover to pursue harmony with the interior.
The compact body of 220mm(8-11/16in.) in depth can be easily installed in the perimeter zone.

Maximum external static pressure 60Pa (VLRMM model)

The additional external static pressure capacity provides flexibility for duct extension, branching, and air outlet configuration.

▸Specifications

			PFFY-P20VLRM-E	PFFY-P25VLRM-E	PFFY-P32VLRM-E	PFFY-P40VLRM-E	PFFY-P50VLRM-E	PFFY-P63VLRM-E
Power source			1-phase 220-240V 50Hz / 1-phase 208-230V 60Hz					
Cooling capacity	*1	kW	2.2	2.8	3.6	4.5	5.6	7.1
	*1	BTU/h	7,500	9,600	12,300	15,400	19,100	24,200
Heating capacity	*1	kW	2.5	3.2	4.0	5.0	6.3	8.0
	*1	BTU/h	8,500	10,900	13,600	17,100	21,500	27,300
Power consumption	Cooling	kW	0.04 / 0.06		0.06 / 0.07	0.065 / 0.075	0.085 / 0.09	0.1 / 0.11
	Heating	kW	0.04 / 0.06		0.06 / 0.07	0.065 / 0.075	0.085 / 0.09	0.1 / 0.11
Current	Cooling	A	0.19 / 0.25		0.29 / 0.30	0.32 / 0.33	0.40 / 0.41	0.46 / 0.47
	Heating	A	0.19 / 0.25		0.29 / 0.30	0.32 / 0.33	0.40 / 0.41	0.46 / 0.47
External finish(Munsell No.)			Galvanized steel plate					
Dimension H x W x D		mm	639 x 886 x 220		639 x 1,006 x 220		639 x 1,246 x 220	
		in.	25-3/16 x 34-15/16 x 8-11/16		25-3/16 x 39-5/8 x 8-11/16		25-3/16 x 49-1/16 x 8-11/16	
Net weight		kg(lbs.)	18.5 (41)		20 (45)	21 (47)	25 (56)	27 (60)
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)					
Fan	Type x Quautity		Sirocco fan x 1		Sirocco fan x 2			
	Airflow rate (Lo-Hi) *2	m^3/min	5.5-6.5		7.0-9.0	9.0-11.0	12.0-14.0	12.0-15.5
		L/s	92-108		117-150	150-183	200-233	200-258
		cfm	194-230		247-318	318-388	424-494	424-547
	External static pressure	Pa	0					
Motor	Type		1-phase induction motor					
	Output	kW	0.015		0.018	0.030	0.035	0.050
Air filter			PP Honeycomb fabric (washable)					
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (ø1/2)					ø15.88 (ø5/8)
	Liquid (Flare)	mm(in.)	ø6.35 (ø1/4)					ø9.52 (ø3/8)
Field drain pipe diameter		mm(in.)	I.D.26 (1) <Accessory hose O.D.27 (1-3/32) (top end :20 (13/16))>					
Sound pressure level (Lo-Hi) *2 *3 *4		dB(A)	34-40		35-40	38-43		40-46

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoor 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB

*2 Air flow rate/Sound pressure level are in (Low-High)

*3 Measured point : 1m x 1m, Power supply : AC240V/50Hz
· 1dB(A) lower at AC230V/50Hz
· 2dB(A) lower at AC220V/50Hz
· 3dB(A) lower at 1.5m x 1.5m point

*4 It is measured in anechoic room.

Floor mounted 60Pa

			PFFY-P20VLRMM-E	PFFY-P25VLRMM-E	PFFY-P32VLRMM-E	PFFY-P40VLRMM-E	PFFY-P50VLRMM-E	PFFY-P63VLRMM-E
Power source			1-phase 220-240V 50Hz / 1-phase 220-240V 60Hz					
Cooling capacity	*1	kW	2.2	2.8	3.6	4.5	5.6	7.1
	*1	BTU/h	7,500	9,600	12,300	15,400	19,100	24,200
Heating capacity	*1	kW	2.5	3.2	4.0	5.0	6.3	8.0
	*1	BTU/h	8,500	10,900	13,600	17,100	21,500	27,300
Power consumption	Cooling	kW	0.04		0.04	0.05	0.05	0.07
	Heating	kW	0.04		0.04	0.05	0.05	0.07
Current	Cooling	A	0.34		0.38	0.43	0.48	0.59
	Heating	A	0.34		0.38	0.43	0.48	0.59
External finish(Munsell No.)			Galvanized steel plate					
Dimension H x W x D		mm	639 x 886 x 220		639 x 1,006 x 220		639 x 1,246 x 220	
		in.	25-3/16 x 34-15/16 x 8-11/16		25-3/16 x 39-5/8 x 8-11/16		25-3/16 x 49-1/16 x 8-11/16	
Net weight		kg(lbs.)	18.5 (41)		20 (45)	21 (47)	25 (56)	27 (60)
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)					
Fan	Type x Quautity		Sirocco fan x 1		Sirocco fan x 2			
	Airflow rate (Lo-Mid-Hi)	m^3/min	4.5-5.5-6.5		6.5-7.5-9.0	8.0-9.5-11.0	10.0-12.0-14.0	11.0-13.0-15.5
		L/s	75-92-108		108-125-150	133-158-183	167-200-233	183-217-258
		cfm	159-194-230		230-265-318	282-335-388	353-424-494	388-459-547
	External static pressure *2	Pa	20/40/60					
Motor	Type		DC motor					
	Output	kW	0.096					
Air filter			PP Honeycomb fabric (washable)					
Refrigerant pipe diameter	Gas	mm(in.)	ø12.7 (ø1/2) Brazed					ø15.88 (ø5/8) Brazed
	Liquid	mm(in.)	ø6.35 (ø1/4) Brazed					ø9.52 (ø3/8) Brazed
Field drain pipe diameter		mm(in.)	I.D.26 (1) <Accessory hose O.D.27 (1-3/32) (top end :20 (13/16))>					
Sound pressure level (Lo-Mid-Hi) *3	20Pa	dB(A)	31-36-40		27-32-37	30-36-40	32-37-41	35-40-44
	40Pa	dB(A)	34-39-42		30-35-41	32-38-42	35-40-44	36-42-47
	60Pa	dB(A)	35-40-43		32-37-42	3.5-39-44	36-41-45	38-43-48

Notes:

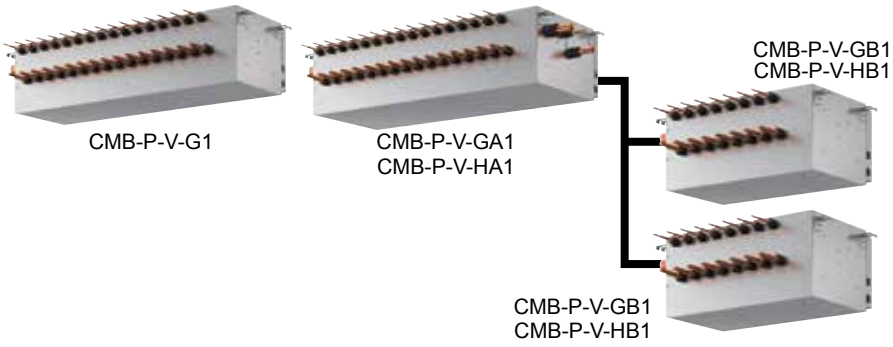
*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoor 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB
pipe length : 7.5m(24-9/16ft) Height difference : 0m(0ft)

*2 The external static pressure is set to 20Pa at factory shipment.

*3 The sound pressure level in operation is measured at 1m apart from the front side and the bottom side of the unit in anechoic room.
(Noise meter A-scale value) Connect the duct of 1m in length to the air outlet.

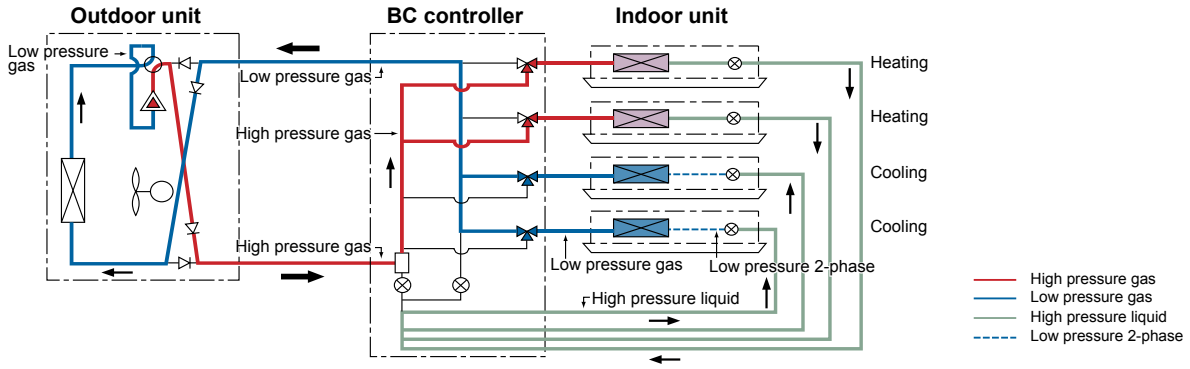
BC CONTROLLER

CMB-P-V-G1
CMB-P-V-GA1
CMB-P-V-HA1
CMB-P-V-GB1
CMB-P-V-HB1



BC CONTROLLER

In many ways, the BC Controller is the technological heart of the CITY MULTI R2/WR2. It works in unison with the outdoor unit to provide simultaneous cooling and heating, something no other two-pipe system can do. The BC Controller is connected to the outdoor unit by two pipes and to each indoor unit by a series of two refrigerant pipes, depending on the indoor unit count. The BC Controller is required for all CITY MULTI R2-Series installations. It comes in 4, 5, 6, 8, 10, 13, and 16-branch options. The BC Controller you select depends on how many indoor units will be operated from each outdoor unit and your total capacity requirements.



▸Specifications

PURY-P200 — PURY-P350

Model name				CMB-P104V-G1	CMB-P105V-G1	CMB-P106V-G1	CMB-P108V-G1	CMB-P1010V-G1	CMB-P1013V-G1	CMB-P1016V-G1
Number of branch				4	5	6	8	10	13	16
Power source				1-phase 220/230/240V 50Hz/60Hz						
Power input	kW	50Hz	Cooling	0.067/0.076/0.085	0.082/0.093/0.104	0.097/0.110/0.123	0.127/0.144/0.161	0.156/0.177/0.198	0.201/0.228/0.255	0.246/0.279/0.312
			heating	0.030/0.034/0.038	0.038/0.043/0.048	0.045/0.051/0.057	0.060/0.068/0.076	0.075/0.085/0.095	0.097/0.110/0.123	0.119/0.135/0.151
		60Hz	Cooling	0.054/0.061/0.067	0.066/0.074/0.082	0.078/0.088/0.097	0.102/0.115/0.127	0.126/0.141/0.156	0.162/0.182/0.201	0.198/0.222/0.246
			heating	0.024/0.027/0.030	0.030/0.034/0.038	0.036/0.041/0.045	0.048/0.054/0.060	0.060/0.068/0.075	0.078/0.088/0.097	0.096/0.108/0.119
Current	A	50Hz	Cooling	0.31/0.34/0.36	0.38/0.41/0.44	0.45/0.48/0.52	0.58/0.63/0.68	0.71/0.77/0.83	0.92/1.00/1.07	1.12/1.22/1.30
			heating	0.14/0.15/0.16	0.18/0.19/0.20	0.21/0.23/0.24	0.28/0.30/0.32	0.35/0.37/0.40	0.45/0.48/0.52	0.55/0.59/0.63
		60Hz	Cooling	0.25/0.27/0.28	0.30/0.33/0.35	0.36/0.39/0.41	0.47/0.50/0.53	0.58/0.62/0.65	0.74/0.80/0.84	0.90/0.97/1.03
			heating	0.11/0.12/0.13	0.14/0.15/0.16	0.17/0.18/0.19	0.22/0.24/0.25	0.28/0.30/0.32	0.36/0.39/0.41	0.44/0.47/0.50
External finish				Galvanized steel plate (Lower part drain pan painting N1.5)						
Indoor unit capacity connectable to 1 branch				Model P80 or smaller (•Use optional joint pipe combing 2 branches when the total unit capacity exceeds 81.)						
Connectable Outdoor unit ★				Refer to the combination chart of BC controller R2/WR2 series						
Height		mm		284						
Width		mm		648					1098	
Depth		mm		432						
Refrigerant piping diameter	To outdoor unit			Connectable outdoor unit capacity						
				P200			P250, P300		P350	
		High pressure pipe		ø15.88 (ø5/8) Brazed			ø19.05 (ø3/4) Brazed		ø19.05 (ø3/4) Brazed	
		Low pressure pipe		ø19.05 (ø3/4) Brazed			ø22.2 (ø7/8) Brazed		ø28.58 (ø1-1/8) Brazed	
	To indoor unit	Liquid pipe		Indoor unit Model 50 or smaller:ø6.35 brazed, Over 50:ø9.52 brazed (ø12.7 with optional joint pipe used.)						
		Gas pipe		Indoor unit Model 50 or smaller:ø12.7 brazed, Over 50:ø15.88 brazed (ø19.05 with optional joint pipe used.)						
Drain pipe				O.D. 32mm						
Net weight		kg		24	27	28	33	38	45	52
Accessories				•Drain connection pipe (with flexible hose and insulation) •Reducer						

▸Specifications

PURY-P200 — PURY-P650 | PURY-P700 — PURY-P900

Model name				CMB-P108V-GA1	CMB-P1010V-GA1	CMB-P1013V-GA1	CMB-P1016V-GA1	CMB-P1016V-HA1
Number of branch				8	10	13	16	
Power source				1-phase 220/230/240V 50Hz/60Hz				
Power input	kW	50Hz	Cooling	0.127/0.144/0.161	0.156/0.177/0.198	0.201/0.228/0.255	0.246/0.279/0.312	
			heating	0.060/0.068/0.076	0.075/0.085/0.095	0.097/0.110/0.123	0.119/0.135/0.151	
		60Hz	Cooling	0.102/0.115/0.127	0.126/0.141/0.156	0.162/0.182/0.201	0.198/0.222/0.246	
			heating	0.048/0.054/0.060	0.060/0.068/0.075	0.078/0.088/0.097	0.096/0.108/0.119	
Current	A	50Hz	Cooling	0.58/0.63/0.68	0.71/0.77/0.83	0.92/1.00/1.07	1.12/1.22/1.30	
			heating	0.28/0.30/0.32	0.35/0.37/0.40	0.45/0.48/0.52	0.55/0.59/0.63	
		60Hz	Cooling	0.47/0.50/0.53	0.58/0.62/0.65	0.74/0.80/0.84	0.90/0.97/1.03	
			heating	0.22/0.24/0.25	0.28/0.30/0.32	0.36/0.39/0.41	0.44/0.47/0.50	
External finish				Galvanized steel plate (Lower part drain pan painting N1.5)				
Indoor unit capacity connectable to 1 branch				Model P80 or smaller (•Use optional joint pipe combing 2 branches when the total unit capacity exceeds 81.)				
Connectable Outdoor unit ★				Refer to the combination chart of BC controller R2/WR2 series				
Height	mm			289				
Width	mm			1,110				
Depth	mm			520				
Refrigerant piping diameter	To outdoor unit			Connectable outdoor unit capacity				
				P200	P250,300	P350	P400~P500	P550~P650	P700~P800/P850~P900*4
		High pressure pipe		ø15.88 (ø5/8) Brazed	ø19.05 (ø3/4) Brazed		ø22.2 (ø7/8) Brazed	ø28.58 (ø1-1/8) Brazed	ø28.58 (ø1-1/8) Brazed/ ø28.58 (ø1-1/8) Brazed
		Low pressure pipe		ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed	ø28.58 (ø1-1/8) Brazed			ø34.93 (ø1-3/8) Brazed/ ø41.28 (ø1-5/8) Brazed
	To indoor unit	Liquid pipe		Indoor unit Model 50 or smaller:ø6.35 brazed, Over 50:ø9.52 brazed (ø12.7 with optional joint pipe used.)				
		Gas pipe		Indoor unit Model 50 or smaller:ø12.7 brazed, Over 50:ø15.88 brazed (ø19.05 with optional joint pipe used.)				
	To another BC controller			Total indoor unit capacity connected to this Sub BC controller				
				~P200	P201~P300	P301~P350	P351~P400	P401~P450
		High press gas pipe		ø15.88 (ø5/8) Brazed	ø19.05 (ø3/4) Brazed		ø22.2 (ø7/8) Brazed	
		Low press gas pipe		ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed	ø28.58 (ø1-1/8) Brazed		
		Liquid pipe		ø9.52 (ø3/8) Brazed		ø12.7 (ø1/2) Brazed		ø15.88 (ø5/8) Brazed
Drain pipe				O.D. 32mm				
Net weight	kg			43	48	55	62	69
Accessories				•Drain connection pipe (with flexible hose and insulation) •Reducer				

Model name				CMB-P104V-GB1	CMB-P108V-GB1	CMB-P1016V-HB1
Number of branch				4	8	16
Power source				1-phase 220/230/240V 50Hz/60Hz		
Power input	kW	50Hz	Cooling	0.060/0.068/0.076	0.119/0.135/0.151	0.237/0.269/0.301
			heating	0.030/0.034/0.038	0.060/0.068/0.076	0.119/0.135/0.151
		60Hz	Cooling	0.048/0.054/0.060	0.096/0.108/0.119	0.192/0.216/0.237
			heating	0.024/0.027/0.030	0.048/0.054/0.060	0.096/0.108/0.120
Current	A	50Hz	Cooling	0.28/0.30/0.32	0.55/0.59/0.63	1.08/1.17/1.26
			heating	0.14/0.15/0.16	0.28/0.30/0.32	0.55/0.59/0.63
		60Hz	Cooling	0.22/0.24/0.25	0.44/0.47/0.50	0.88/0.94/0.99
			heating	0.11/0.12/0.13	0.22/0.24/0.25	0.44/0.47/0.50
External finish				Galvanized steel plate (Lower part drain pan painting N1.5)		
Indoor unit capacity connectable to 1 branch				Model P80 or smaller (•Use optional joint pipe combing 2 branches when the total unit capacity exceeds 81.)		
Connectable Outdoor unit ★				Refer to the combination chart of BC controller R2/WR2 series		
Height	mm			284		284
Width	mm			648		1,098
Depth	mm			432		432
Refrigerant piping diameter	To Main BC controller			Total indoor unit capacity connected this Sub BC controller		
				~P200, P201~P350		~P200, P201~P450
				~P200	P201~P300	P301~P350	P351~P400	P401~P450
		High pressure pipe		ø15.88 (ø5/8) Brazed	ø19.05 (ø3/4) Brazed		ø22.2 (ø7/8) Brazed	
		Low pressure pipe		ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed	ø28.58 (ø1-1/8) Brazed		
		Liquid pipe		ø9.52 (ø3/8) Brazed		ø12.7 (ø1/2) Brazed		ø15.88 (ø5/8) Brazed
	To indoor unit	Liquid pipe		Indoor unit Model 50 or smaller:ø6.35 brazed, Over 50:ø9.52 brazed (ø12.7 with optional joint pipe used.)				
		Gas pipe		Indoor unit Model 50 or smaller:ø12.7 brazed, Over 50:ø15.88 brazed (ø19.05 with optional joint pipe used.)				
Drain pipe				O.D. 32mm				
Net weight	kg			22	32	55		
Accessories				•Drain connection pipe (with flexible hose and insulation) •Reducer				

★Combination chart of BC Controller for R2 series

	P200,250,300,350	P400-650	P700-900
CMB-P V-G1	○	×	×
CMB-P V-GA1	○	○	×
CMB-P V-HA1	×	×	○
CMB-P V-GB1	○	○	○
CMB-P V-HB1	○	○	○

★Combination chart of BC Controller for WR2 series

	P200,250,300	P400,450,500,550,600
CMB-P V-G1	○	×
CMB-P V-GA1	○	○
CMB-P V-HA1	×	×
CMB-P V-GB1	○	○
CMB-P V-HB1	○	○

Notes:

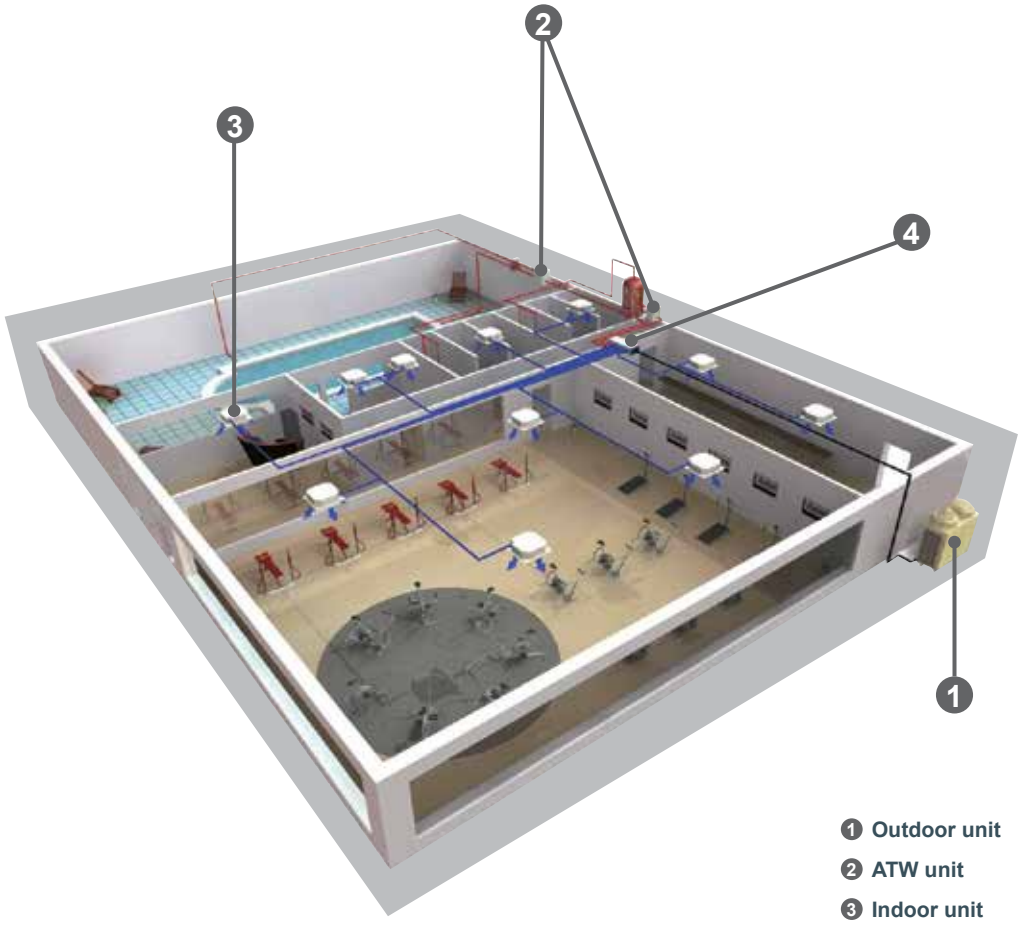
1. The equipment is for R410A refrigerant.
2. Install this product is a location where noise (refrigerant noise) emitted by the unit will not disturb the neighbors.(For use in quiet environments with low background noise, position the BC CONTROLLER at least 5 m away from any indoor units.)
3. Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decrease a little.)
4. When using an outdoor unit – 28HP (P700) or more, use CMB-P1016V-HA1.
5. For sub BC controller CMB-P-B-GB1 the connectable indoor unit capacities may sum to equal that of a P350 unit or less. However, if two sub controllers are used the TOTAL sum of connectable units connected to BOTH sub controllers must also not exceed that a P350 unit. For sub BC controller CMB-P-1016V-HB1 the connectable indoor unit capacities may sum to equal that of a P350 unit or less. However, if two sub controllers are used the TOTAL sum of connectable units connected to BOTH sub controllers must also not exceed that a P450 unit.

PWFY-P100VM-E-BU
PWFY-P100VM-E1-AU
PWFY-P200VM-E1-AU

Air to Water advanced system explained

Air To Water (ATW) series offers the choice between two types of units; a Booster unit and a HEX (Heat Exchanger) unit. A Booster unit offers hot water to a maximum of 70°C and HEX unit offers 45°C in heating and down to 10°C in cooling. Applying heat pump and heat recovery technology to provide hot water, the units are suitable for residences, office buildings, restaurants or hotels, providing an optimal environment while benefiting from reduced running costs and less impact on environment.

ATW system consists of an outdoor unit, a BC controller when connected with R2 series, ATW unit, indoor unit and a controller.



1. Outdoor unit
2. ATW unit
3. Indoor unit
4. BC controller

Line Up

❶ ATW UNIT

BOOSTER UNIT

Benefiting from the heat recovery operation of the CITY MULTI R2 system, Booster unit converts energy from the air to higher temperatures suitable for supplying hot water and results in virtually no energy waste.

PWFY-P100VM-E-BU

Connectable to

CITY MULTI R2/WR2 series REPLACE MULTI R2 series

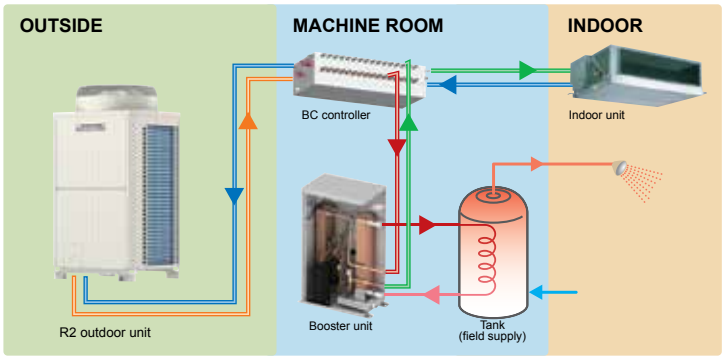
Applications

best for sanitary water, shower, etc.

Operation

up to 70°C

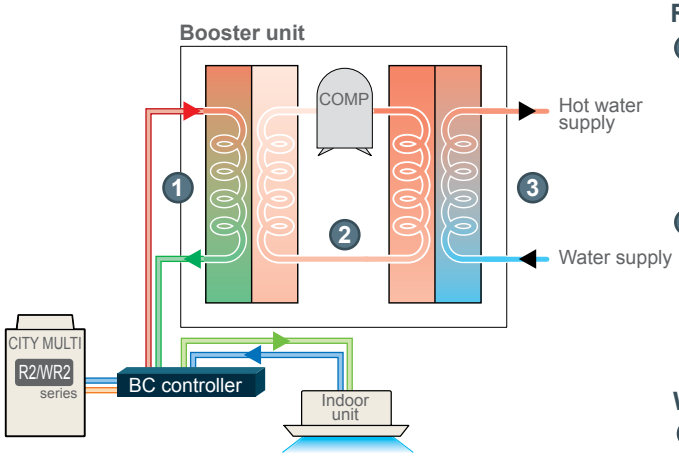
SYSTEM OUTLINE



The Booster unit is connected to a BC controller with refrigerant pipes, and to the water tank with water pipes. The waste heat from cooling operation is utilized for heating operation which provides hot water.

Red — High pressure gas refrigerant
Orange — High pressure 2-phase refrigerant
Green — High pressure liquid refrigerant
Blue — Low pressure gas refrigerant

What makes Booster unit unique?



Red — High pressure gas refrigerant
Orange — High pressure 2-phase refrigerant
Green — High pressure liquid refrigerant
Blue — Low pressure gas refrigerant

Refrigerant flow

❶ From the BC controller, high pressure R410A gas refrigerant is delivered to the Booster unit to exchange heat with the low pressure R134a liquid refrigerant circulating through ② and returns to the BC controller as a high pressure liquid refrigerant.

② Refrigerant R134a circulates inside the two plate heat exchangers inside the unit.
Temperature rises as low-pressure R134a gas refrigerant is compressed by the compressor and becomes high-pressure gas refrigerant.

Water supply

③ Water entering the Booster unit exchanges heat with high-pressure R134a gas refrigerant. The hot water circulates to heat the water inside the tank which will be used for showers, sanitary water, etc.

HEX UNIT

By utilizing waste heat from the R2 outdoor unit for heating operation in HEX unit, it is possible to supply hot water with high efficiency. Also, even when connected with the Y series, it provides efficient operation compared to a conventional system.

PWFY-P100VM-E1-AU
PWFY-P200VM-E1-AU

Connectable to

CITY MULTI
R2/WR2/
Y/WY/ZUBADAN series
S series
REPLACE MULTI
R2/Y series

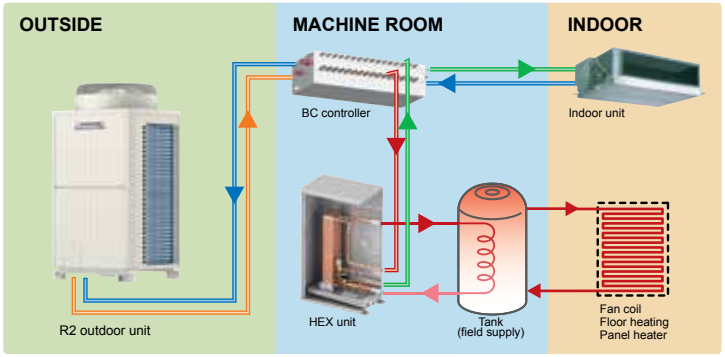
Applications

best for floor heating, panel heater, fan-coil unit(AHU), etc.

Operation

hot water up to 45°C
cold water down to 8°C

SYSTEM OUTLINE HEX unit with R2 series



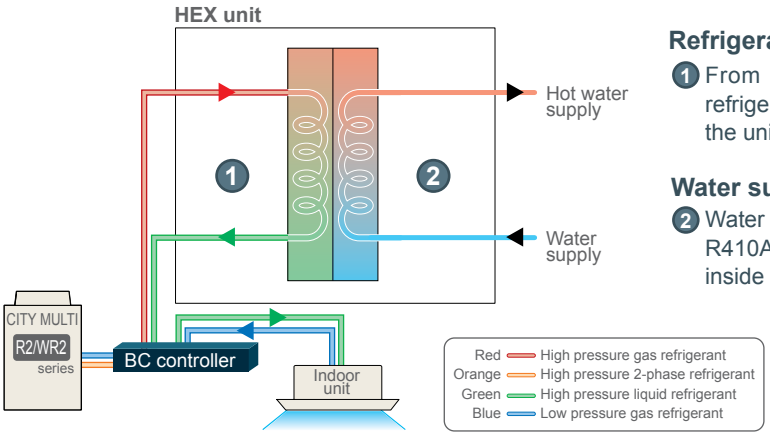
HEX unit is connected to BC controller with refrigerant pipes, and to the water tank with water pipes. HEX unit is not equipped with a compressor.

Red	High pressure gas refrigerant
Orange	High pressure 2-phase refrigerant
Green	High pressure liquid refrigerant
Blue	Low pressure gas refrigerant

*The image is a system example in case of heating mode.
*The necessity of the tank depends on the system configuration.

What makes HEX unit unique with R2/WR2 series?

Hot water supply



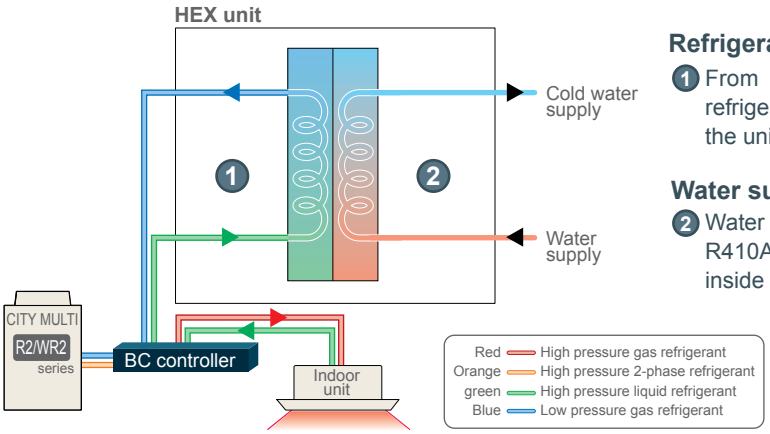
Refrigerant flow

1 From the BC controller, high pressure R410A gas refrigerant is delivered to the HEX unit and returns to the unit as high pressure liquid refrigerant.

Water supply

2 Water entering the HEX unit exchanges heat with the R410A refrigerant and water circulates to heat the water inside the tank.

Cold water supply



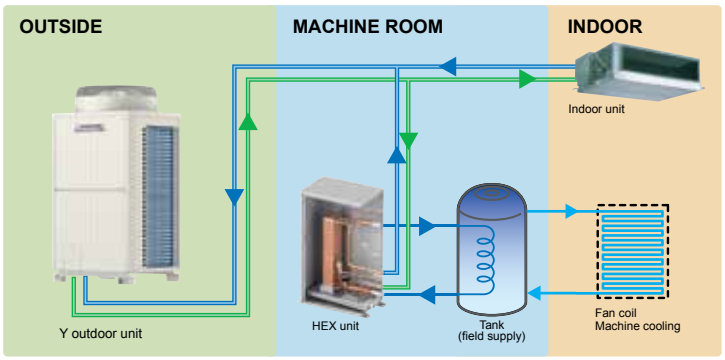
Refrigerant flow

1 From the BC controller, high pressure R410A liquid refrigerant is delivered to the HEX unit and returns to the unit as low pressure gas refrigerant.

Water supply

2 Water entering the HEX unit exchanges heat with the R410A refrigerant and water circulates to cool the water inside the tank.

SYSTEM OUTLINE HEX unit with Y series

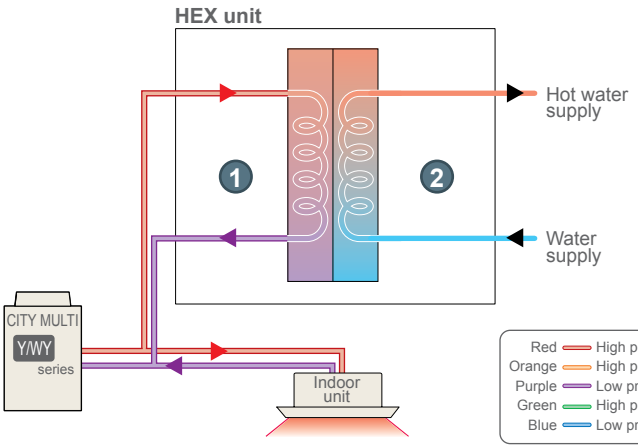


HEX unit is connected to Y outdoor unit with refrigerant pipes, and to the water tank with water pipes. HEX unit is not equipped with a compressor.

Red — High pressure gas refrigerant
Orange — High pressure 2-phase refrigerant
Green — High pressure liquid refrigerant
Blue — Low pressure gas refrigerant

What makes HEX unit unique with Y/WY series?

Hot water supply



Red — High pressure gas refrigerant
Orange — High pressure 2-phase refrigerant
Purple — Low pressure 2-phase refrigerant
Green — High pressure liquid refrigerant
Blue — Low pressure gas refrigerant

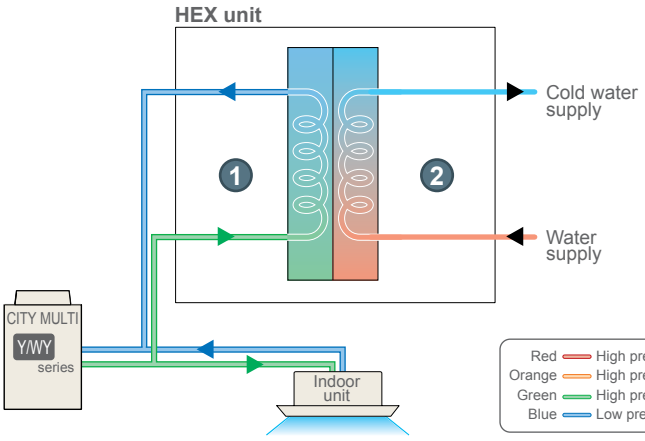
Refrigerant flow

1 From the outdoor unit, high pressure R410A gas refrigerant is delivered to the HEX unit and returns to the unit as low pressure 2-phase refrigerant.

Water supply

2 Water entering the HEX unit exchanges heat with the R410A refrigerant and water circulates to heat the water inside the tank.

Cold water supply



Red — High pressure gas refrigerant
Orange — High pressure 2-phase refrigerant
Green — High pressure liquid refrigerant
Blue — Low pressure gas refrigerant

Refrigerant flow

1 From the outdoor unit, high pressure R410A liquid refrigerant is delivered to the HEX unit and returns to the unit as low pressure gas refrigerant.

Water supply

2 Water entering the HEX unit exchanges heat with the R410A refrigerant and water circulates to cool the water inside the tank.

ATW UNIT
Booster Unit
PWFY-P VM-E-BU

▸ Specifications

Model			PWFY-P100VM-E-BU
Power source			1-phase 220-230-240V 50 / 60Hz
Heating capacity (Nominal)	*1	kW	12.5
	*1	kcal/h	10,800
	*1	BTU/h	42,700
	Power input	kW	2.48
	Current input	A	11.63-11.12-10.66
Temp. range of heating	Outdoor unit/Heat source unit condition	W.B.	-20~32°C (-4~90°F) R2-series
		-	10~45°C (50~113°F) WR2-series
	Booster unit inlet water temp.	-	10~70°C (50~158°F)
Connectable outdoor unit/heat source unit	Total capacity		50~100% of outdoor unit/heat source unit capacity
	Model / Quantity		R2 (Standard, Hi-COP), Replace R2, WR2 series only
Sound pressure level (measured in anechoic room)		dB<A>	44
Diameter of refrigerant pipe	Liquid	mm(in.)	ø9.52 (ø3/8") Brazed
	Gas	mm(in.)	ø15.88 (ø5/8") Brazed
Diameter of water pipe	Inlet	mm(in.)	PT3/4 Screw
	Outlet	mm(in.)	PT3/4 Screw
Field drain pipe size		mm(in.)	ø32 (1-1/4")
External finish			NO
External dimension H × W × D		mm	800 (785 without legs) × 450 × 300
		in.	31-1/2" (30-15/16" without legs) × 17-3/4" × 11-13/16"
Net weight		kg(lbs)	60 (133)
Compressor	Type		Inverter rotary hermetic compressor
	Maker		MITSUBISHI ELECTRIC CORPORATION
	Starting method		Inverter
	Motor output	kW	1.0
	Lubricant		NEO22
Circulating water	Operation volume Range	m^3/h	0.6~2.15
Protection on internal circuit (R134a)	High pressure protection		High pressure sensor, High pressure switch at 3.60 MPa (601 psi)
	Inverter circuit (COMP)		Over - heat protection, Over - current protection
	Compressor		Discharge thermo protection, Over - current protection
Refrigerant	Type × original charge *2		R134a × 1.1kg (0.50lb)
	Control		LEV
Design pressure	R410A	MPa	4.15
	R134a	MPa	3.60
	Water	MPa	1.00
Drawing	External		WKB94L762
	Wiring		WKE94C229
Standard attachment	Document		Installation Manual, Instruction Book
	Accessory		Strainer, Heat insulation material, 2 × Connector sets
Optional parts			NONE
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.

Notes:

*1 Nominal heating conditions
<R2-series>
Outdoor Temp. : 7°CDB/6°CWB (45°FDB / 43°FWB)
Pipe length : 7.5 m (24-9/16 ft)
Level difference : 0m (0ft)
Inlet water Temp 65°C Water flow rate 2.15m^3/h

<WR2-series>
Circulating water Temp. : 20°C (68°F)
Pipe length : 7.5 m (24-9/16 ft)
Level difference : 0m (0ft)
Inlet water Temp 65°C Water flow rate 2.15m^3/h

*2 Do not use refrigerant other than the type indicated in the manuals provided with the unit and on the nameplate.
- Doing so may cause the unit or pipes to burst, or result in explosion or fire during use, during repair, or at the time of disposal of the unit.
- It may also be in violation of applicable laws.
- MITSUBISHI ELECTRIC CORPORATION cannot be held responsible for malfunctions or accidents resulting from the use of the wrong type of refrigerant.

* Due to continuing improvement, the above specifications may be subject to change without notice.
* The unit is not designed for outside installations.
* Please don't use the steel material for the water piping material.
* Please always make water circulate or add the brine to the circulation water when the ambient temperature becomes 0°C (32°F) or less.
* Please always make water circulate or pull out the circulation water completely when not using it.
* Please do not use groundwater and well water.
* Install the unit in an environment where the wet bulb Temp. will not exceed 32°C (90°F).
* The water circuit must use the closed circuit.
* Please do not use it as a drinking water.

ATW UNIT
HEX Unit
PWFY-P VM-E1-AU

▸ Specifications

Model			PWFY-P100VM-E1-AU	PWFY-P200VM-E1-AU
Power source			1-phase 220-230-240V 50 / 60Hz	1-phase 220-230-240V 50 / 60Hz
Heating capacity (Nominal)	*1	kW	12.5	25.0
	*1	kcal/h	10,800	21,500
	*1	BTU/h	42,700	85,300
	Power input	kW	0.015	0.015
	Current input	A	0.068-0.065-0.063	0.068-0.065-0.063
Temp. range of heating	Outdoor unit/ Heat source unit condition	W.B.	-15~15°C (5~60°F) S - series	-
		W.B.	-20~15.5°C (-4~60°F) Y - series	-20~15.5°C (-4~60°F) Y - series
		W.B.	-25~15.5°C (-13~60°F) HP(ZUBADAN) - series	-25~15.5°C (-13~60°F) HP(ZUBADAN) - series
		W.B.	-20~32°C (-4~90°F) R2 - series	-20~32°C (-4~90°F) R2 - series
		-	10~45°C (50~113°F) WY - series	10~45°C (50~113°F) WY - series
		-	10~45°C (50~113°F) WR2 - series	10~45°C (50~113°F) WR2 - series
	HEX unit inlet water temp.	-	10~45°C (50~113°F) S - series, 10~40°C (50~104°F) Y, HP(ZUBADAN), R2, WY, WR2 - series	10~40°C (50~104°F)
Cooling capacity (Nominal)	*2	kW	11.2	22.4
	*2	kcal/h	9,600	19,300
	*2	BTU/h	38,200	76,400
	Power input	kW	0.015	0.015
	Current input	A	0.068-0.065-0.063	0.068-0.065-0.063
Temp. range of cooling	Outdoor unit/ Heat source unit condition	D.B.	-5~46°C (23~115°F) Y - series	-5~46°C (23~115°F) Y - series
		D.B.	-5~43°C (23~110°F) HP(ZUBADAN) - series	-5~43°C (23~110°F) HP(ZUBADAN) - series
		D.B.	-5~46°C (23~115°F) R2 - series	-5~46°C (23~115°F) R2 - series
		-	10~45°C (50~113°F) WY - series	10~45°C (50~113°F) WY - series
		-	10~45°C (50~113°F) WR2 - series	10~45°C (50~113°F) WR2 - series
	HEX unit inlet water temp.	-	10~35°C (50~95°F)	10~35°C (50~95°F)
Connectable outdoor unit/heat source unit	Total capacity		50~100% of outdoor unit/heat source unit capacity	50~100% of outdoor unit/heat source unit capacity
	Model / Quantity		Y (Standard, Hi-COP), Replace Y, S, HP(ZUBADAN) series, R2 (Standard, Hi-COP), Replace R2, WY series, WR2 series	Y (Standard, Hi-COP), Replace Y, HP(ZUBADAN) series, R2 (Standard, Hi-COP), Replace R2, WY series, WR2 series
Sound pressure level (measured in anechoic room)		dB<A>	29	29
Diameter of refrigerant pipe	Liquid	mm(in.)	ø9.52 (ø3/8") Brazed	ø9.52 (ø3/8") Brazed
	Gas	mm(in.)	ø15.88 (ø5/8") Brazed	ø19.05 (ø3/4") Brazed
Diameter of water pipe	Inlet	mm(in.)	PT3/4 Screw	PT 1 Screw
	Outlet	mm(in.)	PT3/4 Screw	PT 1 Screw
Field drain pipe size		mm(in.)	ø32 (1-1/4")	ø32 (1-1/4")
External finish			NO	NO
External dimension H × W × D		mm	800 (785 without legs) × 450 × 300	800 (785 without legs) × 450 × 300
		in.	31-1/2" (30-15/16" without legs) × 17-3/4" × 11-13/16"	31-1/2" (30-15/16" without legs) × 17-3/4" × 11-13/16"
Net weight		kg(lbs)	35 (78)	38 (84)
Circulating water	Operation Volume Range	m^3/h	1.1~2.15	1.8~4.30
Design pressure	R410A	MPa	4.15	4.15
	Water	MPa	1.00	1.00
Drawing	External		KD94R274	KD94R274
	Wiring		WKE94C626	WKE94C626
Standard attachment	Document		Installation Manual, Instruction Book	Installation Manual, Instruction Book
	Accessory		Strainer, Heat insulation material, 2 × Connector sets, Flow switch × 1 set, wire	Strainer, Connecter, Heat insulation material, 2 × Connector sets, Expansion joint, Flow switch × 1 set, wire
Optional parts			Solenoid valve kit: PAC-SV01PW-E	Solenoid valve kit: PAC-SV01PW-E
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.	

Notes:

*1 Nominal heating conditions
<S/Y/HP(ZUBADAN)/R2-series>
Outdoor Temp. : 7°CDB/6°CWB (45°FDB / 43°FWB)
Pipe length : 7.5 m (24-9/16 ft)
Level difference : 0m (0ft)
Inlet water Temp 30°C
Water flow rate 2.15m^3/h(P100), 4.30m^3/h(P200)

<WY/WR2-series>
Circulating water Temp. : 20°C (68°F)
Pipe length : 7.5 m (24-9/16 ft)
Level difference : 0m (0ft)
Inlet water Temp 30°C
Water flow rate 2.15m^3/h(P100), 4.30m^3/h(P200)

*2 Nominal cooling conditions
<Y/HP(ZUBADAN)/R2-series>
Outdoor Temp. : 35°CB (95°FDB)
Pipe length : 7.5 m (24-9/16 ft)
Level difference : 0m (0ft)
Inlet water Temp 23°C
Water flow rate 1.93m^3/h(P100), 3.86m^3/h(P200)

<WY/WR2-series>
Circulating water Temp. : 30°C (86°F)
Pipe length : 7.5 m (24-9/16 ft)
Level difference : 0m (0ft)
Inlet water Temp 23°C
Water flow rate 1.93m^3/h(P100), 3.86m^3/h(P200)

* Due to continuing improvement, the above specifications may be subject to change without notice.
* The unit is not designed for outside installations.
* Please don't use the steel material for the water piping material.
* Please always make water circulate or add the brine to the circulation water when the ambient temperature becomes 0°C (32°F) or less.
* Please always make water circulate or pull out the circulation water completely when not using it.
* Please do not use groundwater and well water.
* Install the unit in an environment where the wet bulb Temp. will not exceed 32°C (90°F).
* The water circuit must use the closed circuit.
* Please do not use it as a drinking water.

Controller
Remote Controller
PAR-W21MAA

▸ Specifications

○ : Each group　× : Not available

Item	Description	Operations	Display
ON / OFF	Runs and stops the operation of a group of units	○	○
Operation mode switching	Switches between Hot Water / Heating / Heating ECO / Anti - freeze / Cooling * Available operation modes vary depending on the unit to be connected. * Switching limit setting can be made via a remote controller.	○	○
Water temperature setting	Temperature can be set within the ranges below. (in increments of 1°C or 1°F) Heating 30°C ~ 50°C Heating ECO 30°C ~ 45°C Hot Water 30°C ~ 70°C Anti-freeze 10°C ~ 45°C Cooling 10°C ~ 30°C * The settable range varies depending on the unit to be connected.	○	○
Preset temperature range limit	Preset temperature range setting can be limited via a remote controller.	○	○
Water temperature display	10°C ~ 90°C (in increments of 1°C or 1°F) * The settable range varies depending on the unit to be connected.	×	○
Permit / Prohibit local operation	Individually prohibits operations of each local remote control function : ON / OFF, Operation modes, water temperature setting, Circulating water replacement warning reset. * Upper level controller may not be connected depending on the unit to be connected.	×	○
Schedule operation	ON / OFF / Water temperature setting can be done up to 6 times one day in the week. (in increments of a minute)	○	○
Error display	When an error is currently occurring on a unit, the afflicted unit and the error code are displayed.	×	○
Self check (Error history)	Searches the latest error history by pressing the CHECK button twice.	○	○
Test run	Enables the Test run mode by pressing the TEST button twice. * Test run mode is not available depending on the unit to be connected.	○	○
Circulating water replacement warning	Displays the circulating water replacement warning via the unit message. Clears the display by pressing the CIR.WATER button twice. * Circulating water replacement warning is not available depending on the unit to be connected.	○	○
Operation locking function	Remote controller operation can be locked or unlocked. · All-switch locking · Locking except ON / OFF switch	○	○

Optional Parts
Solenoid Valve kit

Note:

When you intend to adopt PWFY-AU with below system configuration, you may need to use optional part (PAC-SV01PW-E).
Please contact your Mitsubishi Electric sales office for details.

Applicable System

System Configuration
Y, HP(ZUBADAN), Replace Y, or WY* + PWFY-AU + Indoor Unit

*Solenoid valve kit will be used only when operating the WY at the water temperature below 10°C.

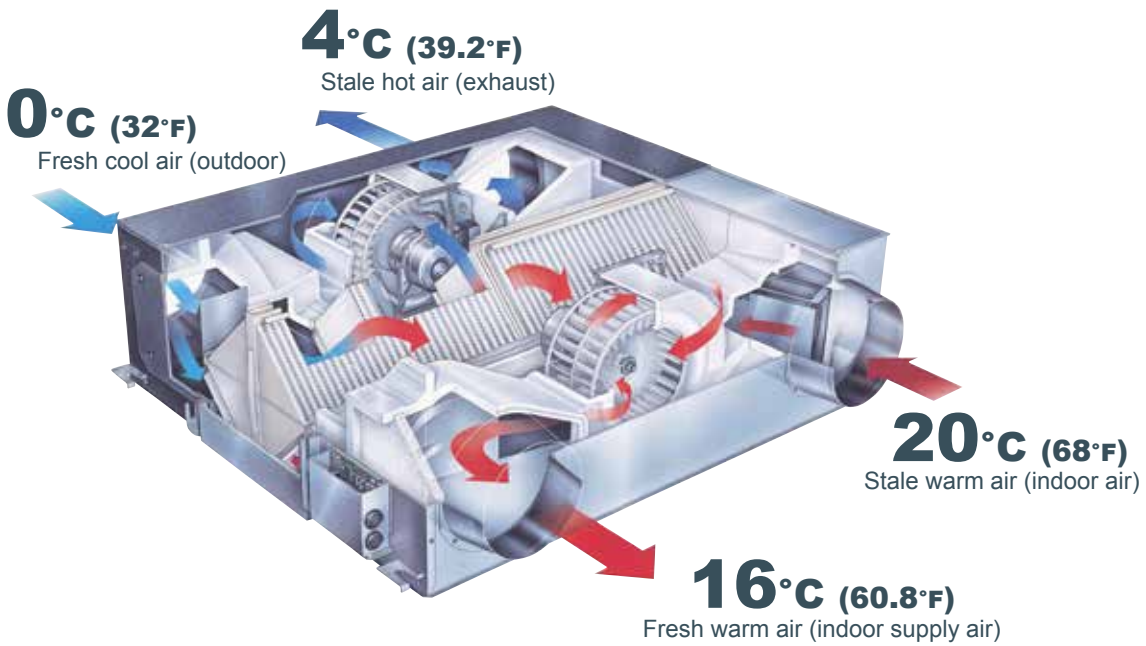
PAC-SV01PW-E

Item			Description	
Power source			1-phase 220-230-240V 50 / 60Hz	
Diameter of refrigerant pipe	Applicable models		PWFY-P100VM-E1-AU	PWFY-P200VM-E1-AU
	Liquid	mm (in.)	ø15.88	ø19.05
	Gas	mm (in.)	ø9.52	ø9.52
External dimension H × W × D		mm	462 × 320 × 207	
		in.	18-1/4" × 12-5/8" × 8-3/16"	
Net weight		kg (lbs)	8.5 (19)	
Drawing	External		WKD94T532	
Standard attachment	Document		Installation Manual	
	Accessory		Specification label, Refrigerant conn.pipe	

RX5 SERIES
Heat Recovery Ventilators

The Ventilation System for Enhanced Air Quality - Lossnay

Combine with Lossnay Ventilation System for enhanced air quality.
Unified Control System allows for greater design freedom.



LGH-15RX5 [150m^3/h Single phase 220-240V 50Hz]
LGH-25RX5 [250m^3/h Single phase 220-240V 50Hz]
LGH-35RX5 [350m^3/h Single phase 220-240V 50Hz]
LGH-50RX5 [500m^3/h Single phase 220-240V 50Hz]
LGH-65RX5 [650m^3/h Single phase 220-240V 50Hz]
LGH-80RX5 [800m^3/h Single phase 220-240V 50Hz]
LGH-100RX5 [1000m^3/h Single phase 220-240V 50Hz]
LGH-150RX5 [1500m^3/h Single phase 220-240V 50Hz]
LGH-200RX5 [2000m^3/h Single phase 220-240V 50Hz]

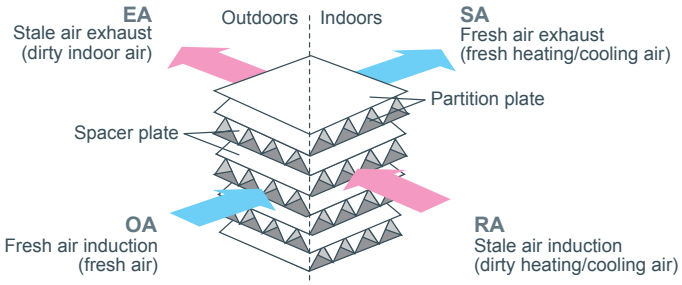
Heat-Exchange Efficiency Obtainable Only with Lossnay.

The secret to the unmatched comfort provided by Lossnay core is the cross-flow, plate-fin structure of the heat-exchange unit. A diaphragm made of a specially processed paper fully separates inducted and exhausted air supplies, ensuring that only fresh air is introduced to the indoor environment.
The superior heat-transfer and moisture permeability of the special paper assure highly effective total heat exchange (temperature and humidity) when inducted and exhausted air supplies cross in the Lossnay core.

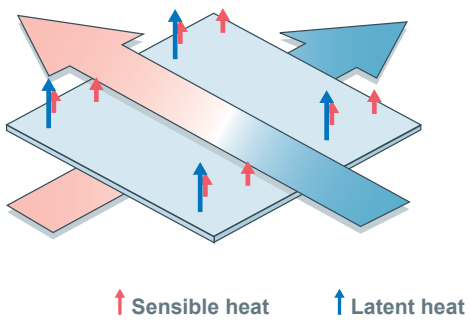
LOSSNAY Technology

- **Two paths ventilation**
  LOSSNAY simultaneously intakes Fresh Air and exhausts Dirty Air.
- **Total energy recover**
  LOSSNAY returns BOTH sensible heat and latent heat.

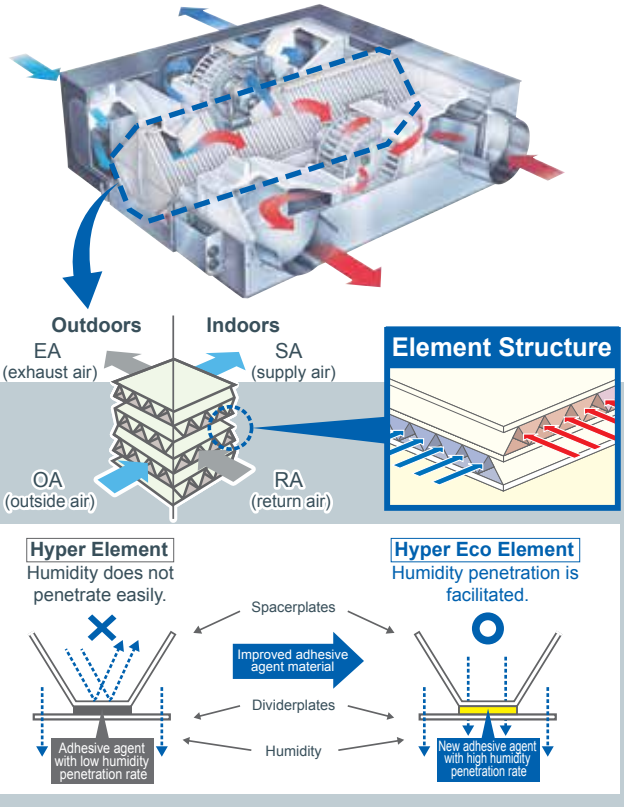
A. Two paths ventilation



B. Total Energy transfer

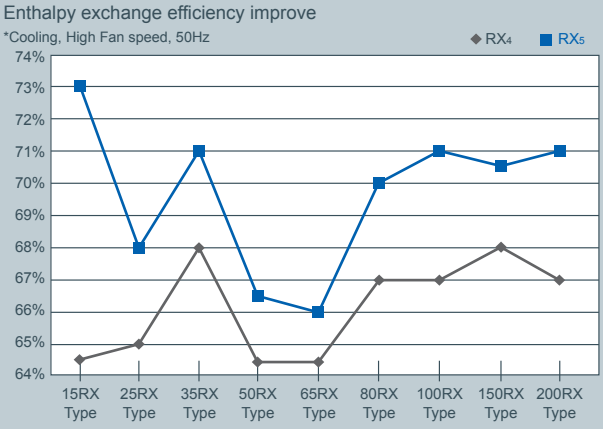


- **Hyper Eco Core**
  Better energy conservation by improved total heat exchange efficiency.



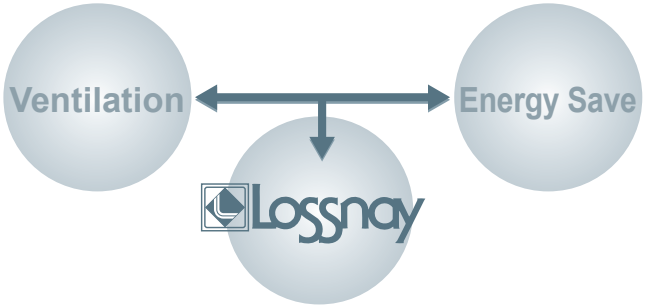
Introducing the new Hyper Eco Element

Mitsubishi Electric's newly developed Hyper Eco Element is on board, offering the industry's best total heat exchange efficiency. Energy conservation performance has been improved not only by reducing the air conditioning load associated with ventilation, but also by facilitating humidity penetration.



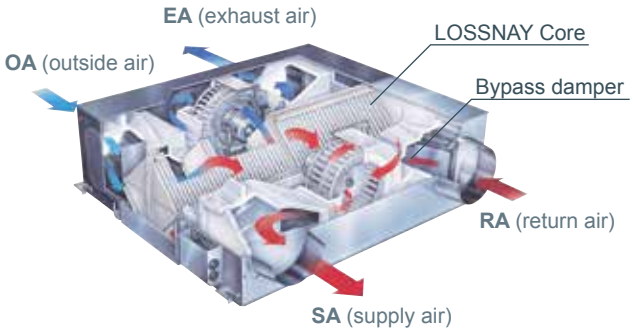
Why LOSSNAY is necessary.

- A lack of ventilation makes people sick from stale indoor air including CO_2, dust, bacteria.
- Opening windows eliminates the stale air, but wastes air-con energy.
- **So we recommend LOSSNAY**
  LOSSNAY simultaneously acheives ventilation and energy saving.

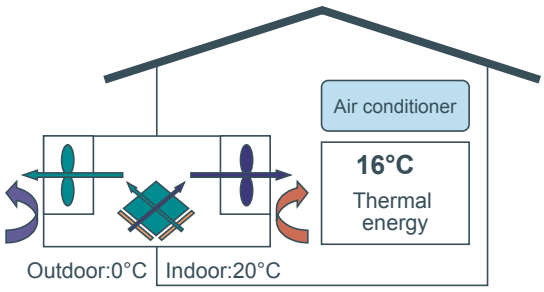


- **This is LOSSNAY !**
  ADVANTAGES
  Clean air supply, dirty air exhaust by Two air paths (OA→ SA and RA→ EA)
  Energy recovery by LOSSNAY Core
  Free cooling by bypass damper
  MULTI VENTILATION MODE for multi ventilation request (Power supply, Power supply/exhaust, Power exhaust)

UNIT STRUCTURE



Energy Recovery Image

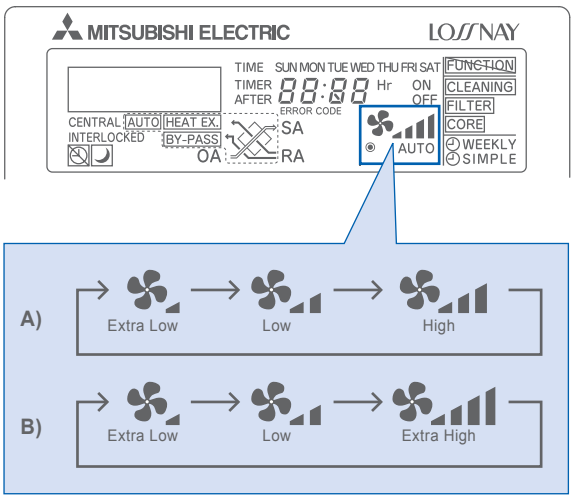


How much recovery?
OA temp. : 0°C → SA temp. : 16°C (Indoor 20°C)

Extra Low Mode

■Additional energy conservation using a four-level air volume system that allows more precise control.

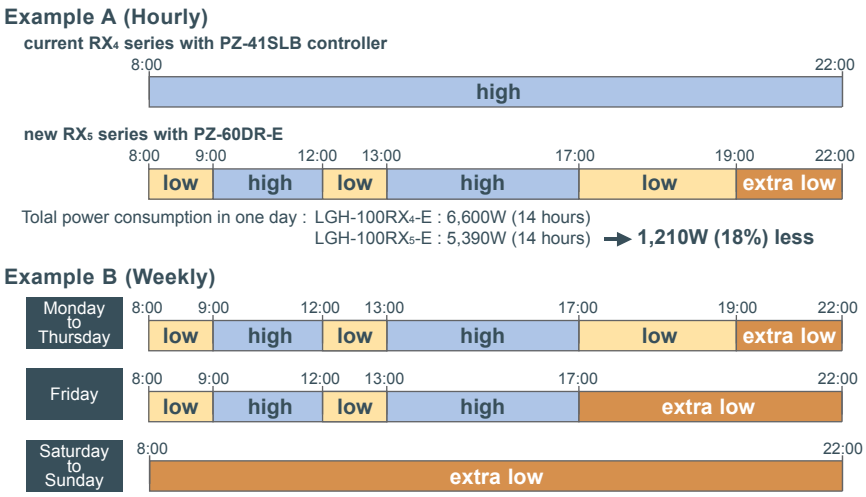
In addition to the conventional Extra High, High, and Low modes, an Extra Low mode is added to provide a more dynamic range of air volume settings and versatility in a variety of installation environments, yielding much better energy conservation. Using a simplified timer function, it switches to Extra Low operation when the operation stop button is activated and it is accordingly possible to implement 24-hour energy conservation ventilation.



* The Extra High and High ventilation modes are selectable by the initial setting.
* Extra-Low not equipped LGH-150RX5 and 200RX5.
* The ventilation mode is actually selected in three levels, and the remote controller also displays these three levels.

Energy Saving by WEEKLY timer

Air volume level can be set hourly (max 8 times) and weekly. You can pre-set air volume according to the predictable requirement so that LOSSNAY can automatically operate at only necessary air-speed at the specified time period, which saves power consumption while maintaining the indoor air quality. Once the weekly timer has been set, no switching on-off is required.



New function: "By-pass" Ventilation External Control Setting

In addition to the automatic damper open/close function, open/close control via external devices is now possible, delivering a “By-pass” ventilation system that is suitable to the installed environment.

Establish the wire connection by inserting the optional remote display adaptor (PAC-SA88HA-E) in the connector CN16 (Ventilation mode selector).

When SW1 is “ON”, the ventilation mode of LOSSNAY is changed to the By-pass ventilation regardless of the setting on the remote controller.

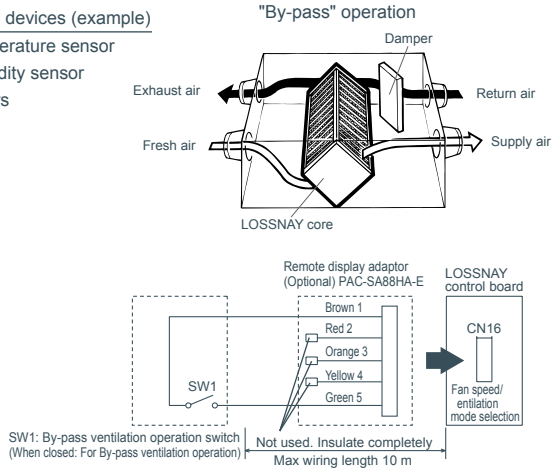
•Automatic ventilation setting

The automatic damper mode automatically provides the correct ventilation for the conditions in the room. The following shows the effect “By-pass” ventilation will have under various conditions.

1. Reduces cooling load

If the air outside is cooler than the air inside the building during the cooling season (such as early morning or at night), “By-pass” ventilation will draw in the cooler outside air and reduce the cooling load on the system.

Control devices (example)
- Temperature sensor
- Humidity sensor
- Timers



2. Night purge

“By-pass” ventilation can be used to release hot air from inside the building that accumulates in buildings during the hot summer season.

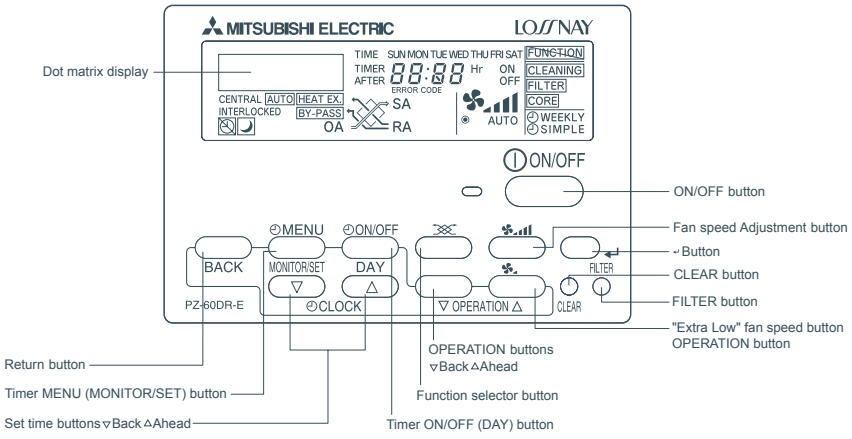
3. Office equipment room cooling

During the cold season, fresh air can be drawn in and used to cool rooms where the temperature has risen due to the use of office equipment.

* When the outdoor air tempereture drops lower than 8°C it changes to the heat exchange ventilation. (Display of the remote controller does not change.)
* In the case of “By-pass” ventilation, the supply air temperature slightly rises more than the outside air temperature because of the heat effect around the ducts or the unit motors.

New Remote Controller PZ-60DR-E

A new remote controller for the RX5 series is now available. In addition to boosting the energy conservation performance of the main unit, the remote controller features a variety of new functions which also allows for additional energy conservation.
The appearance of the remote controller conforms to Mitsubishi Electric air conditioner interface design standards.
Functions that were set using Dip-Switch on the LOSSNAY main unit can now be configured as needed using the new remote controller.
This eliminates the need to crawl under the eaves to change operation settings.
Also, a newly adopted dot matrix display provides much more information, making it easy to check maintenance indications, operation status display, and explanations required when configuring settings.



LGH-15~100RX5-E

Model line up

■ Specification

LGH-15RX5-E

Model		LGH-15RX5-E							
Frequency / Power source		50Hz / Single phase 220-240V							
Ventilation mode		LOSSNAY ventilation				By-pass ventilation			
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low
Current (A)		0.44-0.46	0.37-0.38	0.25-0.25	0.14-0.15	0.45-0.46	0.37-0.38	0.25-0.26	0.14-0.15
Power consumption (W)		96-110	80-90	53-59	30-35	97-110	81-91	54-61	30-35
Air volume	(m^3/h)	150	150	110	70	150	150	110	70
	(L/s)	42	42	31	19	42	42	31	19
External static pressure	(mmH_2O)	10.2-10.7	6.6-7.1	3.6-4.1	1.4	10.2-10.7	6.6-7.1	3.6-4.1	1.4
	(Pa)	100-105	65-70	35-40	14	100-105	65-70	35-40	14
Temperature exchange efficiency (%)		82.0	82.0	84.0	85.5	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	75.0	75.0	77.5	81.0	—	—	—	—
	Cooling	73.0	73.0	76.5	81.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		27.5-28	26.5-27	22-23.5	18	28.5-29	27-28	23-24	18-19
Weight (kg)		20							
Starting current		Under 0.8 A Less							

*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 6 dB greater than the indicated value. (at High Fan speed)

LGH-25RX5-E

Model		LGH-25RX5-E							
Frequency / Power source		50Hz / Single phase 220-240V							
Ventilation mode		LOSSNAY ventilation				By-pass ventilation			
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low
Current (A)		0.52-0.55	0.47-0.48	0.26-0.27	0.17-0.18	0.53-0.55	0.47-0.48	0.26-0.27	0.17-0.18
Power consumption (W)		113-129	102-114	56-62	36-42	115-131	103-115	56-63	36-42
Air volume	(m^3/h)	250	250	155	105	250	250	155	105
	(L/s)	69	69	43	29	69	69	43	29
External static pressure	(mmH_2O)	8.2-8.7	5.1-6.1	2-2.5	0.9	8.2-8.7	5.1-6.1	2-2.5	0.9
	(Pa)	80-85	50-60	20-25	9	80-85	50-60	20-25	9
Temperature exchange efficiency (%)		79.0	79.0	81.5	83.5	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	69.5	69.5	74.0	77.5	—	—	—	—
	Cooling	68.0	68.0	72.5	76.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		26-27	25-26	20-21.5	18-19	26.5-27.5	25.5-26.5	20.5-22	18-19
Weight (kg)		20							
Starting current		Under 0.9 A Less							

*The Air outlets noise (45° angle,1.5 meters in front of the unit) is about 10 dB greater than the indicated value. (at High Fan speed)

LGH-35RX5-E

Model		LGH-35RX5-E							
Frequency / Power source		50Hz / Single phase 220-240V							
Ventilation mode		LOSSNAY ventilation				By-pass ventilation			
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low
Current (A)		0.92-0.92	0.74-0.74	0.5-0.51	0.28-0.3	0.93-0.94	0.77-0.77	0.51-0.52	0.28-0.3
Power consumption (W)		195-212	160-169	105-116	58-69	197-217	164-173	105-116	58-69
Air volume	(m^3/h)	350	350	210	115	350	350	210	115
	(L/s)	97	97	58	32	97	97	58	32
External static pressure	(mmH_2O)	15.8-16.3	7.6-8.2	2.5-3.1	0.9	15.8-16.3	7.6-8.2	2.5-3.1	0.9
	(Pa)	155-160	75-80	25-30	9	155-160	75-80	25-30	9
Temperature exchange efficiency (%)		80.0	80.0	85.0	88.0	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	71.5	71.5	76.5	81.5	—	—	—	—
	Cooling	71.0	71.0	75.5	81.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		32-32	28.5-29.5	21.5-23	18	32.5-32.5	29.5-30.5	21.5-24	18
Weight (kg)		29							
Starting current		Under 2.4 A Less							

*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 10 dB greater than the indicated value. (at High Fan speed)

LGH-15~100RX5-E

LGH-50RX5-E

Model		LGH-50RX5-E							
Frequency / Power source		50Hz / Single phase 220-240V							
Ventilation mode		LOSSNAY ventilation				By-pass ventilation			
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low
Current (A)		1.2-1.25	1.0-1.0	0.85-0.85	0.4-0.4	1.25-1.25	1.0-1.0	0.85-0.85	0.4-0.4
Power consumption (W)		255-286	207-228	175-190	80-95	260-290	210-230	180-195	80-95
Air volume	(m^3/h)	500	500	390	180	500	500	390	180
	(L/s)	139	139	108	50	139	139	108	50
External static pressure	(mmH_2O)	15.3-15.8	6.6-9.2	4.1-6.1	1.0	15.3-15.8	6.6-9.2	4.1-6.1	1.0
	(Pa)	150-155	65-90	40-60	10	150-155	65-90	40-60	10
Temperature exchange efficiency (%)		78.0	78.0	81.0	86.0	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	69.0	69.0	71.0	78.0	—	—	—	—
	Cooling	66.5	66.5	68.0	77.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		33-34	30.5-32	26.5-28	19	34-35	31-32.5	27-29	19
Weight (kg)		32							
Starting current		Under 3.0 A Less							

*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 16 dB greater than the indicated value. (at High Fan speed)

LGH-65RX5-E

Model		LGH-65RX5-E							
Frequency / Power source		50Hz / Single phase 220-240V							
Ventilation mode		LOSSNAY ventilation				By-pass ventilation			
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low
Current (A)		1.7-1.8	1.5-1.5	1.2-1.2	0.6-0.6	1.7-1.8	1.5-1.5	1.2-1.2	0.6-0.6
Power consumption (W)		350-380	308-322	248-265	120-140	350-385	310-335	250-265	120-140
Air volume	(m^3/h)	650	650	520	265	650	650	520	265
	(L/s)	181	181	144	74	181	181	144	74
External static pressure	(mmH_2O)	11.2-12.2	6.1-8.2	4.1-5.1	0.8	11.2-12.2	6.1-8.2	4.1-5.1	0.8
	(Pa)	110-120	60-80	40-50	8	110-120	60-80	40-50	8
Temperature exchange efficiency (%)		77.0	77.0	80.0	86.0	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	68.5	68.5	70.5	78.0	—	—	—	—
	Cooling	66.0	66.0	68.5	77.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		34-34.5	32-33	28.5-31.5	22	34.5-35	32.5-33.5	28.5-30.5	22-22.5
Weight (kg)		40							
Starting current		Under 4.4 A Less							

*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 10 dB greater than the indicated value. (at High Fan speed)

LGH-80RX5-E

Model		LGH-80RX5-E							
Frequency / Power source		50Hz / Single phase 220-240V							
Ventilation mode		LOSSNAY ventilation				By-pass ventilation			
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low
Current (A)		1.75-1.75	1.6-1.6	1.45-1.45	0.60-0.65	1.75-1.75	1.6-1.6	1.45-1.45	0.60-0.65
Power consumption (W)		380-415	345-370	315-340	125-145	380-415	345-370	315-340	120-145
Air volume	(m^3/h)	800	800	700	355	800	800	700	355
	(L/s)	222	222	194	99	222	222	194	99
External static pressure	(mmH_2O)	14.8-15.3	10.7-12.2	8.2-9.7	2	14.8-15.3	10.7-12.2	8.2-9.7	2
	(Pa)	145-150	105-120	80-95	20	145-150	105-120	80-95	20
Temperature exchange efficiency (%)		79.0	79.0	80.5	87.5	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	71.0	71.0	72.5	79.5	—	—	—	—
	Cooling	70.0	70.0	71.5	79.5	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		33.5-34.5	32-33	30-31	22	34.5-35.5	33-34	31-32	22
Weight (kg)		53							
Starting current		Under 3.8 A Less							

*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 16 dB greater than the indicated value. (at High Fan speed)

LGH-15~100RX5-E

LGH-150/200RX5-E

LGH-100RX5-E

Model		LGH-100RX5-E							
Frequency / Power source		50Hz / Single phase 220-240V							
Ventilation mode		LOSSNAY ventilation				By-pass ventilation			
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low
Current (A)		2.3-2.4	2.1-2.1	1.7-1.7	0.9-0.9	2.3-2.4	2.1-2.1	1.7-1.7	0.9-0.9
Power consumption (W)		500-535	445-475	350-380	175-200	510-550	460-485	365-395	175-200
Air volume	(m^3/h)	1000	1000	755	415	1000	1000	755	415
	(L/s)	278	278	210	115	278	278	210	115
External static pressure	(mmH_2O)	16.3-17.3	10.2-11.2	5.6-6.1	1.8	16.3-17.3	10.2-11.2	5.6-6.1	1.8
	(Pa)	160-170	100-110	55-60	18	160-170	100-110	55-60	18
Temperature exchange efficiency (%)		80.0	80.0	83.0	87.0	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	72.5	72.5	74.0	80.0	—	—	—	—
	Cooling	71.0	71.0	73.0	79.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		36-37	34-35	31-32.5	21-22	37-38	35-36	32-33	21-22
Weight (kg)		59							
Starting current		Under 4.6 A Less							

*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 17 dB greater than the indicated value. (at High Fan speed)

LGH-150RX5-E

Model		LGH-150RX5-E					
Frequency / Power source		50Hz / Single phase 220-240V					
Ventilation mode		LOSSNAY ventilation			By-pass ventilation		
Fan speed		Extra High	High	Low	Extra High	High	Low
Current (A)		3.5-3.5	3.2-3.2	2.9-2.9	3.5-3.5	3.2-3.2	2.9-2.9
Power consumption (W)		760-830	690-740	630-680	765-835	695-745	635-685
Air volume	(m^3/h)	1500	1500	1300	1500	1500	1300
	(L/s)	417	417	361	417	417	361
External static pressure	(mmH_2O)	16.3-17.8	13.3-13.8	9.7-10.2	16.3-17.8	13.3-13.8	9.7-10.2
	(Pa)	160-175	130-135	95-100	160-175	130-135	95-100
Temperature exchange efficiency (%)		80.0	80.0	81.0	—	—	—
Enthalpy exchange efficiency (%)	Heating	72.0	72.0	72.5	—	—	—
	Cooling	70.5	70.5	71.5	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		38-39	36-37.5	33.5-35	39-40.5	37.5-39	35.5-37
Weight (kg)		105					
Starting current		Under 7.3 A Less					

*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 19 dB greater than the indicated value. (at High Fan speed)

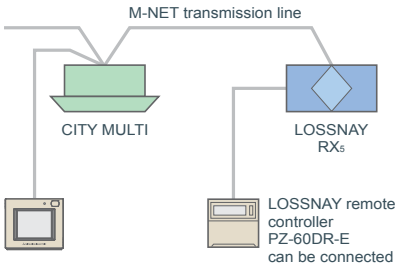
LGH-200RX5-E

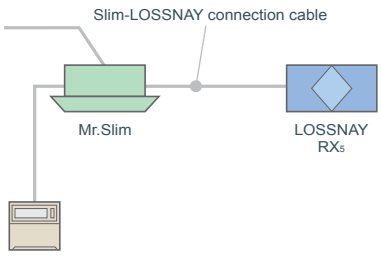
Model		LGH-200RX5-E					
Frequency / Power source		50Hz / Single phase 220-240V					
Ventilation mode		LOSSNAY ventilation			By-pass ventilation		
Fan speed		Extra High	High	Low	Extra High	High	Low
Current (A)		4.8-4.8	4.2-4.2	3.4-3.4	4.8-4.8	4.2-4.2	3.4-3.4
Power consumption (W)		1035-1100	910-980	715-785	1040-1110	915-980	720-785
Air volume	(m^3/h)	2000	2000	1580	2000	2000	1580
	(L/s)	556	556	439	556	556	439
External static pressure	(mmH_2O)	16.3-16.8	10.2-10.7	6.1-6.6	16.3-16.8	10.2-10.7	6.1-6.6
	(Pa)	160-165	100-105	60-65	160-165	100-105	60-65
Temperature exchange efficiency (%)		80.0	80.0	83.0	—	—	—
Enthalpy exchange efficiency (%)	Heating	72.5	72.5	73.5	—	—	—
	Cooling	71.0	71.0	72.0	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		39.5-40	37-38	32.5-34	40.5-41	38-39	33.5-35
Weight (kg)		118					
Starting current		Under 11.9A Less					

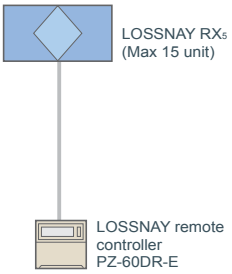
*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 20 dB greater than the indicated value. (at High Fan speed)

Control

■The New Remote Controller PZ-60DR-E enables simple control setting

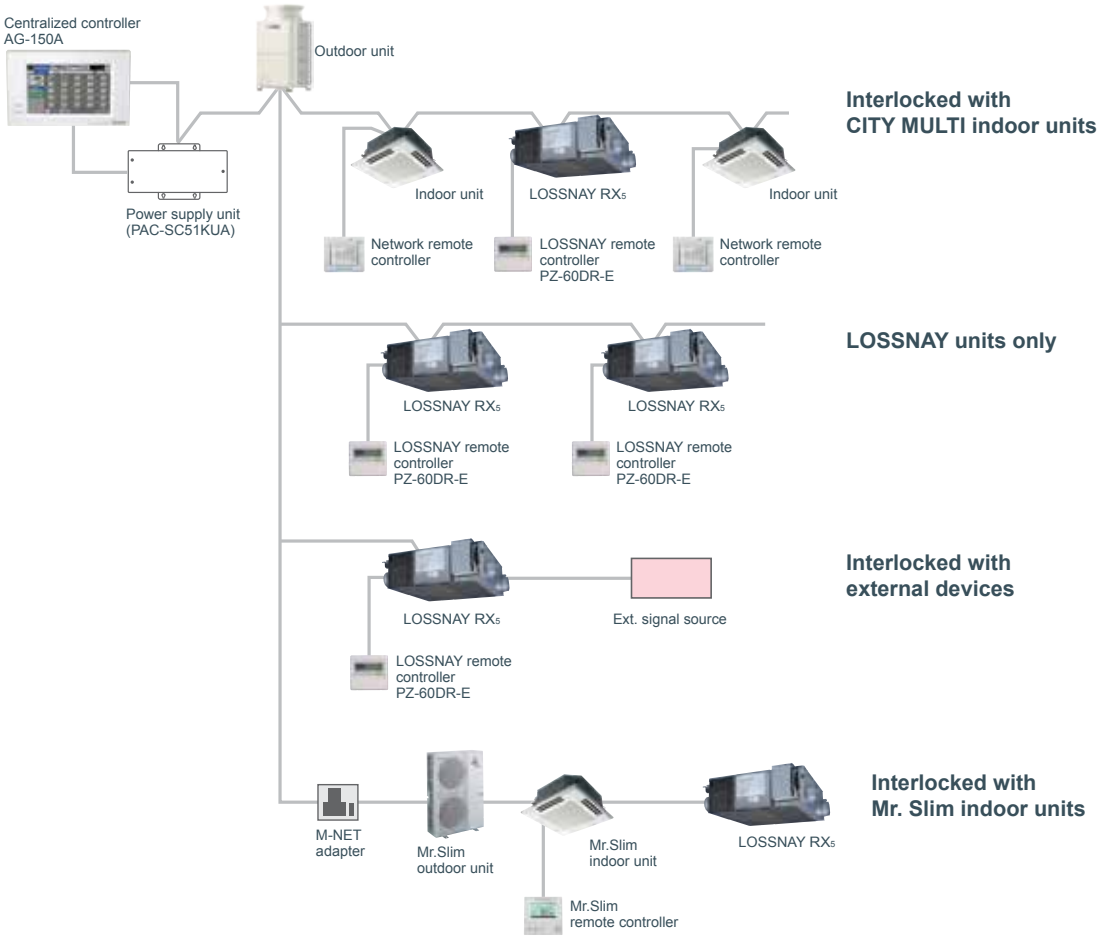
<table>
<tr><th colspan="2">Interlocked with Air conditioners</th><th rowspan="2">LOSSNAY independent</th></tr>
<tr><th>Interlocked with CITY MULTI</th><th>Interlocked with Mr.Slim</th></tr>
<tr>
<td> 

PZ-52SF-E can be used insted of PZ-60DR-E, However, function is limited and connecting position is different.</td>
<td> 

The LOSSNAY remote controller (PZ-60DR-E, PZ-41SLB-E) can not be used with this system.</td>
<td> 

PZ-41SLB-E can be connected however function is limited.</td>
</tr>
</table>

■Centralized Controller System



Air Handling Unit Controller

PAC-AH-M-J

The Air Handling Unit Controller is an interface to allow connection to third party manufacturers equipment.

Mitsubishi Electric City Multi outdoor units are used with this interface box, creating an ideal solution when a unique air handling unit is required. The Air Handling Unit Controllers are supplied with LEV expansion device(s).

- Discharge or return air temperature control
- Temperature set point by control 0-10VDC
- Auto mode available for ease of application
- Error input
- IP2x rated (only for internal use)

R410A

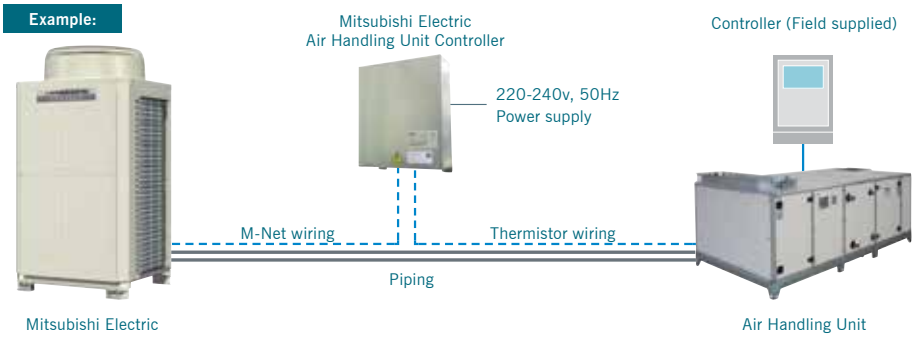
PAC-AH-M-J - AHU Controller

MODEL REFERENCE		PAC-AH125M-J	PAC-AH125M-J	PAC-AH140M-J	PAC-AH250M-J	PAC-AH250M-J	PAC-AH500M-J	PAC-AH500M-J
AIR HANDLING UNIT SIZE		P100	P125	P140	P200	P250	P400*2	P500*2
ALLOWED HEAT EXCHANGER CAPACITY (KW) - HEATING (MIN/MAX)		10.0 - 12.5	12.5 - 16.0	16.0 - 18.0	18.0 - 25.0	25.0 - 31.5	40.0 - 50.0	50.0 - 63.0
ALLOWED HEAT EXCHANGER CAPACITY (KW) - COOLING (MIN/MAX)		9.0 - 11.2	11.2 - 14.0	14.0 - 16.0	16.0 - 22.4	22.4 - 28.0	36.0 - 45.0	45.0 - 56.0
ALLOWED HEAT EXCHANGER VOLUME (CM^3)		1500 - 2850	1900 - 3550	2150 - 4050	3000 - 5700	3750 - 7100	6000 - 11400	7500 - 14200
REFERENCE AIR FLOW RATE (M3/H)*3		2000	2500	3000	4000	5000	8000	10000
STANDARD EVAPORATOR PATH NUMBER*1		4 - 5	4 - 5	5 - 6	6 - 10	8 - 10	16 - 20	16 - 20
DIMENSIONS (MM)	WIDTH	328	328	328	328	328	328	328
( ) = INC MOUNTINGS	DEPTH	104 (122)	104 (122)	104 (122)	104 (122)	104 (122)	104 (122)	104 (122)
	HEIGHT	378 (420)	378 (420)	378 (420)	378 (420)	378 (420)	378 (420)	378 (420)
WEIGHT (KG)		5	5	5	5	5	5	5
PIPE SIZE (MM)	GAS	15.88	15.88	15.88	19.05	22.22	28.58	28.58
	LIQUID	9.52	9.52	9.52	9.52	9.52	12.7	15.88

Note: One air handling unit controller is required per air handling unit. Saturated refrigerant temperature at exit of evaporator = 8.5ºC, SH = 5K, liquid temperature = 25ºC, air = 27ºCDB/19ºCWB.
*1 When the diameter of the heat exchanger tube is ø9.52.
*2 P400 and P500 are not compatible with PURY and PQRY.
*3 If using in combination with standard indoor units, then these figures do not apply.

APPLICABLE OUTDOOR UNITS	
PUHY-P Y(S)JM-A	PURY-P Y(S)JM-A
PUHY-EP Y(S)JM-A	PURY-EP Y(S)JM-A
PUHY-HP Y(S)HM-A	PURY-RP YJM-B
PUHY-RP Y(S)JM-B	PQRY-P Y(S)HM-A
PQHY-P Y(S)HM-A	

Example:



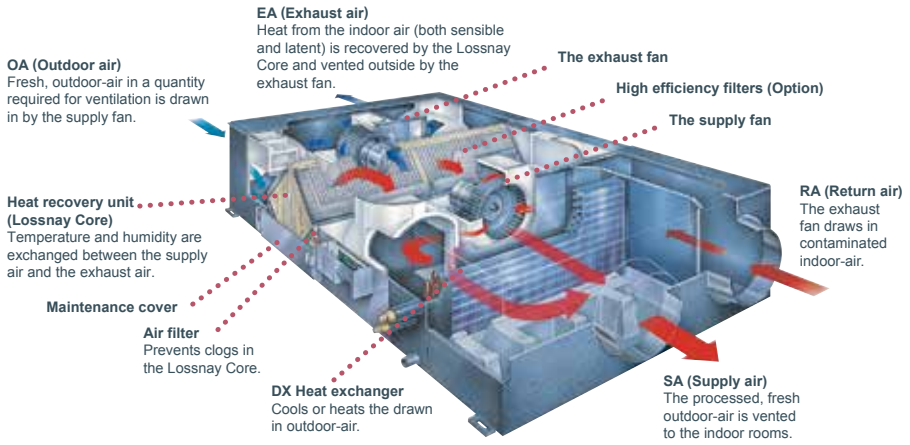
OA Processing Units

RD3 Series

A Total Air Conditioning Package For Remarkable Power

Lossnay Ventilation and Air Conditioning
1. When the load is light ⇒ Main air conditioning
2. When the load is heavy ⇒ Supplemental air conditioning

The OA (outdoor-air) Processing Unit creates an optimum environment while providing substantial energy savings. The OA Processing Unit comprises forced air ventilation, heat recovery, heating and cooling, and air purification. This total air conditioning system keeps indoor air fresh and comfortable all year round, and keeps it free of contaminants which can cause ailments and “sick building syndrome”. Inside the OA Processing Unit is the Lossnay Core, a heat-exchange unit that transfers heat efficiently, cutting ventilation load by as much as 70%. A remarkable product found nowhere else, this special combination of functionality and performance contained within a single unit ensures users ample comfort, good health, and energy savings.

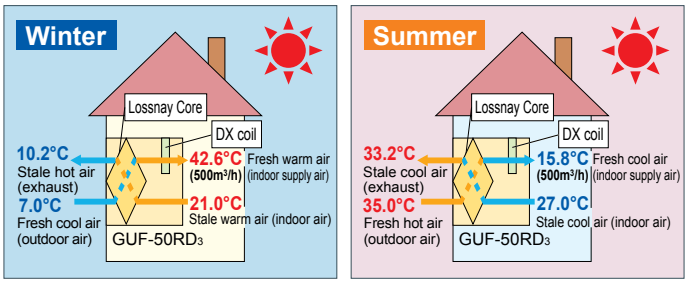


The Air Conditioning Function

Two Units in One

Along with Lossnay ventilation, the OA Processing Unit is really two units in one, functioning as the main air conditioner when the load is light and adding supplemental air conditioning when the load is heavy. Also, with ventilation and air conditioning integrated, space is saved and installation expense kept to a minimum. What’s more, the air temperature in any room can be perfectly adjusted to the desired temperature of the occupants via the OA Processing Unit, which can be used as the indoor unit of the CITY MULTI air conditioning system. The heat recovery function maximizes efficiency and saves energy, benefiting the environment and helping companies cut costs. It also reduces the refrigerant load and lowers the amount of horsepower required by the outdoor unit.

Temperature simulation (Example : GUF-50RD3)



Specification

Model			GUF-50RD3	GUF-100RD3
Power source			1-phase 220-240V 50Hz, 1-phase 220V 60Hz	
Cooling capacity *1		kW	5.46 <1.83>	11.17 <3.85>
Figure in < > is the recovery capacity by LOSSNAY core. *1		kcal / h	4,700 <1,600>	9,600 <3,300>
		BTU / h	18,600 <6,200>	38,100 <13,100>
	Power input	kW	235-265	480-505
	Current input	A	1.15	2.20
Heating capacity *2		kW	6.18 <2.01>	12.50 <4.20>
Figure in < > is the recovery capacity by LOSSNAY core. *2		kcal / h	5,300 <1,700>	10,800 <3,600>
		BTU / h	21,100 <6,900>	42,700 <14,300>
	Power input	kW	235-265	480-505
	Current input	A	1.15	2.20
Capacity equivalent to indoor unit			P32	P63
Humidifying capacity		kg / h	-	-
		lbs / h	-	-
	Humidifier		-	
External finish			Galvanized, with grey insulation sheet	
External dimension H x W x D		mm	317 x 1,016 x 1,288	398 x 1,231 x 1,580
		in.	12-1/2 x 40 x 50-3/4	15-11/16 x 48-1/2 x 62-1/4
Net weight		kg (lbs)	54 (120)	92 (203)
Heat exchanger	LOSSNAY core		Partition, Cross-flow structure, Special preserved paper-plate.	
	Refrigerant coil		Cross fin (Aluminum fin and copper tube)	
FAN	Type x Quantity		SA: Centrifugal fan (Sirocco fan) x 1	
			EA: Centrifugal fan (Sirocco fan) x 1	
	External static press.	Pa	140	140
		mmH_2O	14.3	14.3
	Motor type		Totally enclosed capacitor permanent split-phase induction motor, 4 poles, 2units	
	Motor output	kW	-	-
	Driving mechanism		Direct-driven by motor	
	Airflow rate (High value)	m^3 / h	500	1,000
		L / s	139	139
		cfm	294	589
Sound pressure level (Low-High) (measured in anechoic room)		dB <A>	33.5-34.5	38-39
Insulation material			Polyester sheet	
Air filter	Supplying air		Non-woven fabrics filter (Gravitational method 82%) & Optional part: High efficiency filter (Colorimetric method 65%)	
	Exhausting air		Non-woven fabrics filter (Gravitational method 82%)	
Protection device			Fuse	
Refrigerant control device			LEV	
Diameter of refrigerant pipe	Liquid	mm (in.)	ø6.35 (ø1/4) Flare	ø9.52 (ø3/8) Flare
	Gas	mm (in.)	ø12.7 (ø1/2) Flare	ø15.88 (ø5/8) Flare
Diameter of drain pipe		mm (in.)	VP25	

Notes:

*1 Cooling : Indoor 27°CDB/19°CWB, Outdoor 35°CDB/24°CWB

*2 Heating : Indoor 20°CDB/13.8°CWB, Outdoor 7°CDB/16°CWB

Remote Controller

- Individual Remote Controller
- Centralised Remote Controller

The Importance of Control

The need for control is paramount in order to optimise the performance of any air conditioning system and minimise its running costs. Mitsubishi Electric offers a wide range of control options designed to meet such needs.

Operating an air conditioning system without the right control can prove costly. It's therefore important to ensure that every system is correctly specified to the degree of control it requires. Mitsubishi Electric have a wide range of controls available 'off-the-shelf' and individual control systems can be specifically designed to match.

Good controls will benefit any application, large or small. Air conditioning products need to react to a variety of factors: different room sizes, usage and staff levels; changes in the climate; electronic equipment and lighting ...the list goes on. So whatever the application, optimum control of air conditioning systems is essential and will result in a constant, comfortable environment, which in turn is both energy and cost efficient.

A Degree of Difference

When an air conditioning system is not properly controlled, it will not run as efficiently as it should. For every degree that the system deviates from the required temperature, energy costs can rise by up to 5%. Specify one of the many control options from Mitsubishi Electric to ensure air conditioning works as intended, whilst giving the optimum amount of control.

The Simpler, The Better

With the array of comprehensive control systems available from Mitsubishi Electric, it becomes simple to design and install air conditioning systems. From a simple hand-held controller to a AE-200E system - you are in control.

System Controller

Mitsubishi Electric's Air-conditioner Network System (MELANS) leads air conditioner management a PC browser and Network era.

▶MELANS

Use of our MELANS products enhances efficiency and quality of air-conditioning, contributing to energy saving and reduction in running cost. We offer a wide variety of MELANS products to meet all requirements - from the smallest and simplest to the largest and most complex.
We have individual remote controllers, various centralised controllers, and centralised integrated software, as well as BMS interface hardware and software etc. Above all, with AE-200E/AG-150A/EB-50GU-J/GB-50ADA-J, PC browser and long distance remote control (monitoring and operating) via communication Network is possible and easy.

M-NET

Individual Remote Controller

All of the local remote controllers feature liquid crystal and LED displays and easy to operate.

Remote Controller
PAR-31MAAE
PAR-U02MEDA

Simple Remote Controller
PAC-YT52CRA

Wireless Remote Controller
PAR-FL32MA
PAR-FA32MA
PAR-SA9FA-E
PAR-SL94B-E

Centralized Remote Controller

Advanced Touch Controller
AT-50B

ON/OFF Remote Controller
PAC-YT40ANRA

NEW
AE-200E/AE-50E
AG-150A
PAC-YG50ECA
EB-50GU-J
GB-50ADA-J

AHC ADAPTER
PAC-IF01AHC-J *1

PI Controller
PAC-YG60MCA

DIDO Controller
PAC-YG66DCA

AI Controller
PAC-YG63MCA

*1. Advanced HVAC CONTROLLER

CITY MULTI

OUTDOOR UNIT
- Y : PUHY
- R2 : PURY

INDOOR UNIT
- PEFY
- PMFY
- PLFY
- PCFY
- PKFY
- PFFY

Interface
BAC-HD150

Interface
LMAP04-E

BACnet® transmission line (Ethernet)

LonWorks® transmission line

MITSUBISHI ELECTRIC's CITY MULTI can be easily connected to the building management system through BACnet®.

BUILDING MANAGEMENT SYSTEM

Ethernet

Air-Conditioning Control System

This is a specialized air conditioning management system, in which up to 2000 indoor units can be centrally controlled.

Integrated centralized control software TG-2000A

Integrated centralized control software TG-2000A

*Some controllers cannot be used in combination with certain models of devices.

Integrated Communications Control with Mitsubishi Electric's Unique Transmission Network (M-NET)

Model	Local remote controller *10				System controller *10											
	PAR-31MAAE	PAR-U02MEDA	PAC-YT52CRA	PAR-FL32MA	PAC-YT40ANRA	AT-50B	AE-200E / AE-50E		AE-200E + AE-50E		AG-150A		AG-150A + PAC-YG50ECA		EB-50GU-J	GB-50ADA-J		TG-2000A *4 *5
Controllable Groups / Indoors (Group / Indoor) *9	1 / 16	1 / 16	1 / 16	1 / 16	16 / 50	50 / 50	50 / 50		200 / 200		50 / 50		150 / 150		50 / 50	50 / 50		2000 / 2000
							AE-200E	Browser*4	AE-200E	Browser*4	AG-150A	Browser*4	AG-150A	Browser*4	EB-50GU-J	Browser*4	GB-50ADA-J	Browser*4	
■Operating																		
ON / OFF	○	○	○	○	◎	◎	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	▲	◎ ■	▲	◎ ■	◎ ■
Mode (cool / heat / dry / fan)	○	○	○	○	N	◎	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	N	◎ ■	N	◎ ■	◎ ■
Temperature-set	○	○	○	○	N	◎	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	N	◎ ■	N	◎ ■	◎ ■
Dual set point *11	○	○	○	N	○*12	◎	◎ ■	◎ ■	◎ ■	◎ ■	N	N	N	N	N	◎ ■	N	N	◎ ■
Local Permit / Prohibit	N	N	N	N	N	◎	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	N	◎ ■	N	◎ ■	◎ ■
Fan speed	○	○	○	○	N	◎	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	N	◎ ■	N	◎ ■	◎ ■
Air-flow direction	○	○	○	○	N	◎	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	◎ ■	N	◎ ■	N	◎ ■	◎ ■
■Status monitoring																		
ON / OFF	○	○	○	○	◎	◎	◎	○	◎	○	◎	○	◎	○	▲	○	▲	○	○ ■
Mode (cool / heat / dry / fan)	○	○	○	○	N	○	○	○	○	○	○	○	○	○	N	○	N	○	○
Temperature-set	○	○	○	○	N	○	○	○	○	○	○	○	○	○	N	○	N	○	○
Local Permit / Prohibit	○	○	○	○	○	○	○	○	○	○	○	○	○	○	N	○	N	○	○
Fan speed	○	○	○	○	N	○	○	○	○	○	○	○	○	○	N	○	N	○	○
Air-flow direction	○	○	○	○	N	○	○	○	○	○	○	○	○	○	N	○	N	○	○
Indoor temperature	○	○	○	N	N	○	○	○	○	○	○	○	○	○	N	○	N	○	○
Filter sign	○	○	N	N	N	◎	○	○	○	○	○	○	○	○	N	○	N	○	○
Error flashing	○	○	○	○	○	◎	○	○	○	○	○	○	○	○	▲	○	▲	○	○ ■
Error code	○	○	○	N	○	○	○	○	○	○	○	○	○	○	N	○	N	○	○
Operation hour	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	●
■Scheduling																		
One-day	○	○	N	N	N	○	◎ ■	◎ ■	◎ ■	◎ ■	●	●	●	●	N	●	N	●	●
Times of ON / OFF per day	1	1	N	1	N	16	24	24	24	24	24	24	24	24	N	24	N	24	24
Weekly	○	○	N	N	N	○	◎ ■	◎ ■	◎ ■	◎ ■	○(●)	○(●)	○(●)	○(●)	N	○(●)	N	○(●)	○(●)
Times of ON / OFF per week	8 x 7	8 x 7	N	N	N	16 x 7	24 x 7	24 x 7	24 x 7	24 x 7	24 x 7	24 x 7	24 x 7	24 x 7	N	24 x 7	N	24 x 7	24 x 7
Annual	N	N	N	N	N	N	◎ ■	◎ ■	◎ ■	◎ ■	●	●	●	●	N	●	N	●	●
Optimized start-up	N	N	N	N	N	N	○	○	○	○	○	○	○	○	N	○	N	○	○
Auto-off timer	○	○	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Min. timer setting unit (minute)	5	5	N	10	N	5	1	1	1	1	1	1	1	1	N	1	N	1	1
■Recording																		
Error record	○	N	N	N	N	○	○	○	○	○	○	○	○	○	N	○	N	○	○
Daily / monthly report	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	◎
Electricity charge	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	●
Energy management data	N	N	N	N	N	N	N	●	N	●	N	N	N	N	N	●	N	N	N
■Other																		
Temp-set limitation by Local R / C	○	○	○	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Temp-set limitation by System controller *4	○ *6	○	○ *6	N	N	○ *6	N	○ *2 *6	N	○ *2 *6	N	○ *2 *6	N	○ *2 *6	N	○ *2 *6	N	○ *2 *6	◎ *6
Operation-lock	○	○	○	N	N	◎	N	N	N	N	N	N	N	N	N	N	N	N	N
Night setback	○	○	N	N	N	◎	○	○*2	○	○*2	○	○*2	○	○*2	N	○*2	N	○*2	○
Sliding temperature control	N	N	N	N	N	N	○	○*2	○	○*2	○	○*2	○	○*2	N	○*2	N	○*2	○
■Management (Group / Interlocked)																		
Ventilation interlock	N /○	N /○	N /○	N	○	○	○	○/○ *2	○	○/○ *2	○	○/○ *2	○	○/○ *2	N	○/○ *2	N	○/○ *2	○/○
Group setting	○ *1	○	○ *1	N	○	○	○	○*2	○	○*2	○	○*2	○	○*2	N	○*2	N	○*2	○
Block setting	N	N	N	N	N	N	○	○*2	○	○*2	○	○*2	○	○*2	N	○*2	N	○*2	○
Revision of electricity charge	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	□ ●
■Operating on LOSSNAY interlocked (Group / Interlocked)																			
ON / OFF	N /○	N /○	N /○	N /○*8	◎/◎*3	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	▲/▲	◎/◎	▲/▲	◎/◎	◎/◎
Fan speed	N /○	N /○	N	N	N	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	N / N	◎/◎	N / N	◎/◎	◎/◎
Ventilation mode	N / N	N	N	N	N	◎/ N	◎/ N	◎/ N	◎/ N	◎/ N	◎/ N	◎/ N	◎/ N	◎/ N	◎/ N	◎/ N	N / N	◎/ N	N / N	◎/ N	○/ N
■Status monitoring on LOSSNAY interlocked (Group / Interlocked)																			
ON / OFF	N /○	N /○	N /○	N	N	○/○	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	▲/▲	◎/◎	▲/▲	◎/◎	◎/◎
Fan speed	N /○	N /○	N	N	N	○/○	○/○	○/○	○/○	○/○	○/○	○/○	○/○	○/○	○/○	○/○	N / N	○/○	N / N	○/○	○/○
Ventilation mode	N	N	N	N	N	○/ N	○/ N	○/ N	○/ N	○/ N	○/ N	○/ N	○/ N	○/ N	○/ N	○/ N	N / N	○/ N	N / N	○/ N	○/ N

◎: Each group / Batched ; ○: Each group ; □: Block (for CITY MULTI Indoor unit, not for all Mr.SLIM) ; ●: AE-200E/AE-50E/AG-150A/GB-50ADA-J/EB-50GU-J license registration possible.
(●) : License registration for the optional functions required N : Not Available (Not Used.) △: Batched only ; ▲: Batched handling (for maintenance) ■: Block

*1. Group setting via wiring between Indoor units with cross-over cable;
*2. Installation possible at Initial setting web browser;
*3. Inter-lock is set at Local remote controller.
*4. AE-200E/AE-50E/AG-150A/EB-50GU-J/GB-50ADA-J license registration to AE-200E/AE-50E/AG-150A/EB-50GU-J/GB-50ADA-J is required to monitor and operate the units by browser and TG-2000A.
5. AG-150A connected with PAC-YG50ECA is compatible with TG-2000A Ver.6.10 or later. GB-50ADA-J is compatible with TG-2000A Ver. 6.30* or later. EB-50GU-J is compatible with TG-2000A Ver. 6.40A or later. AE-200E/AE-50E is compatible with TG-2000A Ver. 6.50* or later.
*6. This function can be set only on the ME remote controller. This function cannot be used with the MA/Simple MA remote controller. (But, the validity of this function with the MA/Simple MA remote controller depends on the indoor unit model, and there are possibilities that this function can be used with them.)
*7. This function is available only when applying together with TG-2000A, AE-200E/AE-50E/AG-150A, GB-50ADA-J, and EB-50GU-J.
*8. Inter-lock is set from system controllers (Except PAC-YT40ANRA) or local remote controllers.
*9. The maximum number of controllable units decreases depending on the indoor unit model.
*10. For indoor use only.
*11. This function is supported only when all the indoor units, remote controllers, and system controllers that are connected to a given group features the function.
*12. For the availability of the function, please contact your local distributor.

LOSSNAY remote controller PZ-52SF	
■Controllable LOSSNAY Groups	1
■Controllable LOSSNAY unit	16
■Operating ON/OFF	○
Mode (automatic ventilation/vent-heat interchange/normal ventilation)	○
Local Permit-Prohibit	N
Fan speed	○
Air flow direction	N
■Scheduling	N
■Recording	N

■Management Group setting	○
Block setting	N
■Status monitoring ON/OFF	○
Mode (automatic ventilation/vent-heat interchange/normal ventilation)	○
Local Permit-Prohibit	○
Fan speed	○
Air flow direction	N
Filter sign	○
Error flashing	○
Error code	○

Air conditioner control system interface

LMAP04-E : LonWorks® Interface
Controls up to 50 Groups/ 50 units, for details, refer to its description.

BAC-HD150: BACnet® Interface
Controls up to 50 Groups/ 50 units, up to 150 Groups/ 150 units with three expansion controllers for details, refer to its description.

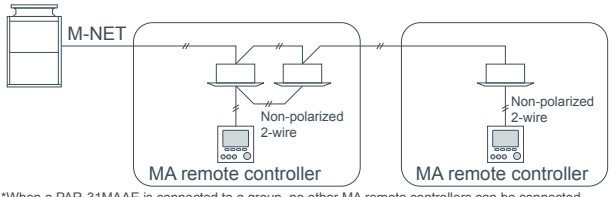
○ : Each group, N: Not Available

Individual Remote Controller

Wired MA remote controller PAR-31MAAE

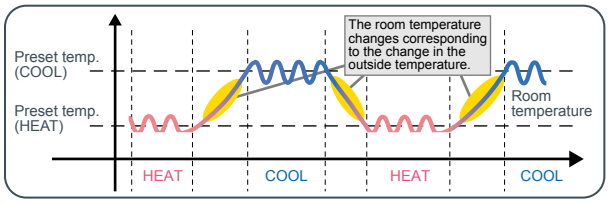
Dimensions: 120(W) x 120(H) x 19(D) mm
: 4-3/4(W) x 4-3/4(H) x 3/4(D) in.

Example of system configuration



*When a PAR-31MAAE is connected to a group, no other MA remote controllers can be connected to the same group.

Operation pattern during Auto (dual set point) mode



- **Temperature will be displayed either in Centigrade in 0.5- or 1-degree increments, or in Fahrenheit, depending on the indoor unit model and the display mode setting on the remote controller.**
- **Dual set point**
  When the operation mode is set to the Auto (dual set point) mode, two preset temperatures (one each for cooling and heating) can be set. Depending on the room temperature, indoor unit will automatically operate in either the Cool or Heat mode and keep the room temperature within the preset range.
  *Please contact your Mitsubishi Electric sales office for details.
- **Backlit LCD (Liquid Crystal Display)**
  Large, easy-to-see display
  Full-dot LCD display with large characters for easy viewing
  Contrast also adjustable
- **Night Setback**
  To prevent indoor dew or excessive temperature rise, this control starts heating operation when the control object group is stopped and the room temperature drops below the preset lower limit temperature. Also, this control starts cooling operation when the control object group is stopped and the room temperature rises above the preset upper limit temperature.
- **Language selection**
  Language to be displayed on the screen can be selected from eight languages: English, French, German, Spanish, Italian, Portuguese, Swedish, and Russian.

Functions

○: Each group ×: Not available

Item	Description	Operations	Display
ON/OFF	Switches between ON and OFF.	○	○
Operation mode switching	Switches among Cool/Dry/Fan/Auto/Heat.	○	○
Room temp. setting	The temperature can be set within the following range. Cool/Dry : 19°C - 30°C / 67°F - 87°F Heat : 17°C - 28°C / 63°F - 83°F Auto : 19°C - 28°C / 67°F - 83°F * Set temperature range varies depending on the model.	○	○
Air flow direction setting	Changes airflow direction. * Available airflow directions vary depending on the model.	○	○
Louver setting	Switches between louver ON/OFF.	○	○
Ventilation equipment control	Interlocked setting and interlocked operation setting with the CITY MULTI LOSSNAY units can be made. The Stop/Low/High settings of the ventilation equipment can be controlled.	○	○
Error information	When an error occurs, an error code and the unit address appear. Air conditioning unit model, serial number, and contact number can be set to appear when an error occurs. (The information above needs to be entered in advance.) * An error code may not appear depending on the error.	–	○
Timer	ON/OFF timer Turns ON and OFF daily at a set time. • Time can be set in 5-minute increments. • It is also possible to set the ON time only or the OFF time only. Auto-OFF timer Turns off the unit after a certain period of operation. • Operation time can be set to a value from 30 to 240 minutes in 10-minute increments.	○	○
Allows/disallows local operation	The following operation can be prohibited by making certain settings on the centralized controller: ON/OFF, operation mode setting, temperature setting, fan speed, air direction, and filter sign reset. * While an operation is prohibited, the operation icon lights up (only on the Main display in the "Full" mode).	×	○
Operation lock	The following operation can be prohibited respectively: ON/OFF, operation mode setting, temperature setting, and airflow direction setting.	○	○
Temperature range restriction	The room temperature range for each operation mode can be restricted.	○	○
Auto return	The units operate at the preset temperature after a designated period. (Time can be set to a value from 30 to 120 in 10-minute increments.) * Not valid when the temperature setting range is restricted.	○	×

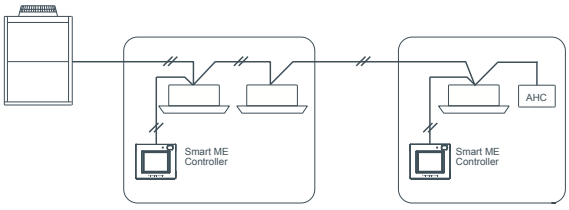
Smart ME Controller PAR-U02MEDA

Dimensions : 140(W) x 120(H) x 25(D) mm
: 5-9/16(W) x 4-3/4(H) x 1(D) in.

Dual Set Point

- **This Smart ME Controller is designed to control Mitsubishi Electric's air conditioning units and also allows for the control of other manufacturer's products connected via Mitsubishi Electric's AHC (Advanced HVAC CONTROLLER).**
- **It can control up to sixteen indoor units and one AHC.**
- **The Smart ME Controller features such basic functions as operations and monitoring of air conditioning units and schedule-control functions and is equipped with four built-in sensors (temperature, humidity, occupancy, brightness). These enable integrated control of the system, including the humidifiers and ventilation units connected to the system via AHC, to help create a comfortable environment.**
- **When the built-in occupancy sensor detects vacancy in a specific zone, the controller uses its internal function to reduce energy-consumption.**

Example of system configuration



Functions

○:Each group ×:Not available

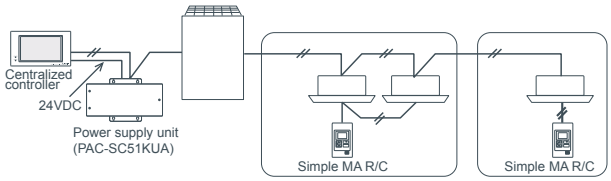
Item	Description	Operations	Display
ON/OFF	Switches between ON and OFF.	○	○
Operation mode switching	Switches between Cool / Drying / Fan / Heat / Auto. Operation modes vary depending on the indoor unit model. Auto mode is for CITY MULTI R2, and WR2 series only.	○	○
Temperature setting	The temperature can be set within the following range. Cool / Drying : 19°C - 35°C / 67°F - 95°F Heat : 4.5°C - 28°C / 40°F - 83°F Auto : (single set point) : 19°C - 28°C / 67°F - 83°F Auto : (dual set points) [Cool] Same as the set temp. range for Cool mode. [Heat] Same as the set temp. range for Heat mode. * The settable temperature ranges vary depending on the indoor unit model.	○	○
Fan speed setting	Changes fan speed. * Available fan speeds vary depending on the model.	○	○
Air flow direction setting	Changes airflow direction. * Available airflow directions vary depending on the model.	○	○
Allows/disallows local operation	The following operation can be prohibited by making certain settings on the centralized controller: ON/OFF, operation mode setting, temperature setting, fan speed, air direction, and filter sign reset. * While an operation is prohibited, the operation icon lights up.	×	○
Error information	When an error occurs, an error code and the unit address appear. Contact number can be set to appear when an error occurs. (The information above needs to be entered on the Service menu.)	—	○
Schedule (Weekly timer)	Weekly ON/OFF times, operation mode, and set temperatures can be set. • Time can be set in 5-minute increments. Up to 8 schedule patterns can be set per day of the week. * Not valid when the ON/OFF timer is set.	○	○
Timer	ON/OFF timer Turns ON and OFF daily at a set time. • Time can be set in 5-minute increments. • It is also possible to set the ON time only or the OFF time only. Auto-OFF timer Turns off the unit after a certain period of operation. • Operation time can be set to a value from 30 to 240 in 10-minute increments.	○	○
Energy-save control during vacancy	When vacancy is detected by the occupancy sensor, the energy-save control assist function is activated. Four control types are available for selection: ON/OFF/Set temperature/Fan speed/Thermo-off. The brightness sensor can be used in conjunction with the occupancy sensor to detect the occupancy/vacancy status more accurately.	○	○

Individual Remote Controller

Simple remote controller PAC-YT52CRA (MA)

Dimensions: 70(W) x 120(H) x 14.5(D) mm
: 2-3/4(W) x 4-23/32(H) x 9/16(D) in.

Example of system configuration



- **Dual set point**
  When the operation mode is set to the Auto (dual set point) mode, two preset temperatures (one each for cooling and heating) can be set. Depending on the room temperature, indoor unit will automatically operate in either the Cool or Heat mode and keep the room temperature within the preset range.
  *Please contact your Mitsubishi Electric sales office for details.
- **Backlit LCD**
  Backlight for operation in dark places
- **Flat back**
  Slim, flat design - install without creating a hole in the wall
  Thickness is less than 14.5mm [0.6(in)]
- **Vane button (standard)**
  The Vane button has been added to allow the user to change airflow direction (ceiling-cassette and wall-mounted types).

Pressing the button will switch the vane directions.

*The settable vane direction varies depending on the indoor unit model to be connected.
* If the unit has no vane function, the vane direction cannot be set.
In this case, the vane icon blinks when the button is pressed.

- **The only wiring required is cross-over wiring based on two-wire signal lines.**
- **Room temperature sensors are built-in.**
- **Can operate all types of indoor units**
  *Since this controller has limited functions, it should always be used in conjunction with standard controller or centralized controller.
- **LCD temperature setting and display in 1°C /1°F increments.**

Functions

□: Each unit ○: Each group ×: Not available

Item	Description	Operations	Display
ON/OFF	Changes between ON and OFF.	○	○
Operation mode switching	Select from COOL, DRYING, FAN, AUTO, and HEAT. * AUTO mode is settable only when those functions are available on the indoor unit.	○	○
Temperature setting	The temperature can be set within the following range. Cool/Drying : 19°C - 35°C/67°F - 95°F Heat : 4.5°C - 28°C/40°F - 83°F Auto (single set point) : 19°C - 28°C/67°F - 83°F Auto (dual set points) [Cool] Same as the set temp. range for Cool mode. [Heat] Same as the set temp. range for Heat mode. * Set temperature range varies depending on the model.	○	○
Fan speed setting	Changes the fan speed. * The settable fan speed varies depending on the indoor unit model to be connected.	○	○
Permit / Prohibit local operation	By setting a centralized controller, the following local operations are prohibited: ON/OFF; operation mode; preset temperature; * The CENTRAL icon appears while the local operations are prohibited.	×	○
Error	Displays the current error status with the address. * The address may not be displayed depending on the error status.	×	□
Ventilation equipment	When the CITY MULTI indoor unit is connected, interlocked setting of the CITY MULTI LOSSNAY unit is possible. When the Mr. SLIM indoor unit (A-control) is connected, interlocked operation of the microcomputer-type LOSSNAY unit is possible.	○	○
Set temperature range limit	The preset temperature range can be restricted for each operation mode (COOL/HEAT/AUTO).	○	○

Wireless remote controller PAR-FL32MA / PAR-FA32MA / PAR-SA9FA

PAR-FL32MA

Dimensions: 58(W) x 159(H) x 19(D) mm
: 2-5/16(W) x 6-5/16(H) x 3/4(D) in.

PAR-FA32MA

Dimensions: 70(W) x 120(H) x 22.5(D) mm
: 2-3/4(W) x 4-3/4(H) x 7/8(D) in.

PAR-SA9FA-E
(4-way Cassette signal receiver)

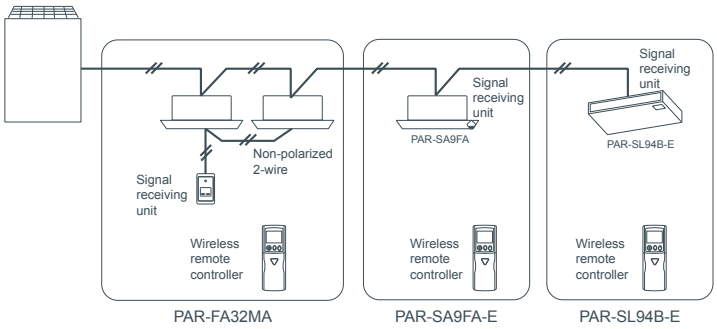
Dimensions: 256(H) x 19(D) mm

PAR-SL94B-E
(Wireless remote controller kit for ceiling suspended)

Dimensions: 182(W) x 57(H) x 31(D) mm

- **No need to configure addresses for group operation.**
- **Lit LED keeps you informed of operation - blinking even gives you the error code via the number of blinks.**
- **Can be used with the MA remote controller.**
  *When used in group configurations, wiring between indoor units is required.
  *Combining ME remote controller and/or LOSSNAY remote controller in a group is not possible.
- **LCD temperature setting and display in 1°C /1°F increments.**

Example of system configuration



Correspondence table

	receiver	transmitter
PMFY-P VBM PLFY-P VCM/VLMD PFFY-P VKM PEFY-P VMR-E-L/R/VMH PFFY-P VLEM/VKM/VLRM/VLRMM PEFY-P VMS1(L) PEFY-VMA(L)	PAR-FA32MA	PAR-FL32MA
PCFY-P VKM	PAR-FA32MA PAR-SL94B-E	
PLFY-P VBM-E	PAR-SA9FA-E	
PKFY-P VBM-E PKFY-P VHM/VKM	Built-in	

Functions

○: Each group ×: Not available

Item	Description	Operations	Display
ON/OFF	ON and OFF operation for a single group	○	○
Temperature setting	Sets the temperature for a single group Range of temperature setting Cool/Dry : 19°C - 30°C (14°C - 30°C) / 67°F - 87°F (57°F - 87°F) Heat : 17°C - 28°C (17°C - 28°C) / 63°F - 83°F (63°F - 83°F) Auto : 19°C - 28°C (17°C - 28°C) / 67°F - 83°F (63°F - 83°F) ( ) For PEFY/PFFY by setting DipSW 7-1 to ON and limits to NI6H fan speed only. * Set to PAR-FL32MA according to its Installation Manual 4 "Model setting".	○	○
Air flow direction setting	Air flow direction angles (4-angle, Swing) Auto Louver ON/OFF. Air flow direction settings vary depending on the model.	✳	✳
Timer operation	One ON/OFF setting can be set for one day.	○	○
Permit / Prohibit local operation	Individually prohibit operation of each local remote control function (ON/OFF, Change operation mode, Set temperature, Reset filter). *1 If operation is performed when the local remote controller inactivation command is received from the main system controller, a buzzer will ring and an LED will flash.	×	○*1
Ventilation equipment	Up to 16 indoor units can be connected to an interlocked system that has one LOSSNAY. The LOSSNAY will run in interlock with the operation of indoor unit. *2 The fan rate and mode cannot be changed.	×*2	×

*Some models will have different display for the air flowdirection and fan speed. Set the air flow direction and fan speed when performing initial setting.

Centralised Remote Controller

With our new Advanced Touch Controller AT-50B, easy and simple operation via the touch panel offers an optimal air environment for individual units.

Advanced Touch controller AT-50B

Dimensions: 180(W) x 120(H) x 30(D) mm
: 7-2/16(W) x 4-12/16(H) x 1-3/16(D) in.

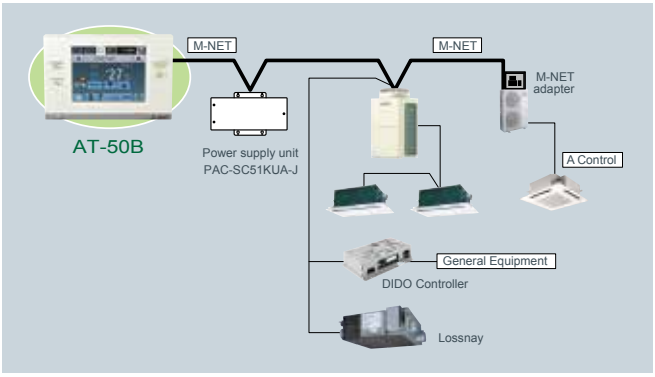
Dual Set Point

- **Temperature will be displayed either in Centigrade in 0.5- or 1-degree increments, or in Fahrenheit, depending on the indoor unit model and the display mode setting on the remote controller.**
- **Dual set point**

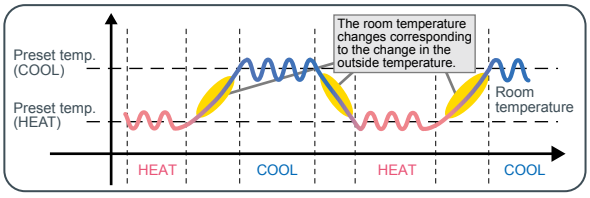
  When the operation mode is set to the Auto (dual set point) mode, two preset temperatures (one each for cooling and heating) can be set. Depending on the room temperature, indoor unit will automatically operate in either the Cool or Heat mode and keep the room temperature within the preset range.

  *Please contact your Mitsubishi Electric sales office for details.

System structure



Operation pattern during Auto (dual set point) mode



Design

Backlit LCD (Liquid Crystal Display) Touch Panel

5-inch color LCD touch panel enables easy and simple operation.
The backlight lights up when the panel is touched, and lights off after certain period of time.
The touch panel displays the operation status of the units in GRID, LIST or in GROUP.

GRID (zoom-out) screen
Displays the operation status of all groups.

GRID (zoom-in) screen
Displays the detailed operation status of each group.

LIST screen
Displays the detailed operation status of each group with group name.

GROUP screen
Displays the detailed operation status of each group.
Sets group operations.

Functions

Three in One

The following three features are integrated into AT-50B.

- Control up to 50 indoor units from one location
- A weekly programmable timer, being able to control up to 50 indoor units
- Control up to 50 units/50 groups of air conditioners

Weekly and daily schedule

5 patterns of one day and 12 patterns of weekly schedule (16 settings max. per pattern).
Two types of weekly schedule can be set.

System changeover

Operation mode can be switched depending on indoor temperature setting and target temperature of each group or a representative indoor unit.

Night setback function

This function allows two-temperatures to be set to keep the desired room temperature when the units are not in operation and during the time this function is effective. The unit automatically starts heating (cooling) operation when the temperature drops below (rises above) the preset lower (upper) limit temperature. This is not only for a comfortable environment, but also for saving energy.

Main system controller/Sub system controller

AT-50B can be set to Sub System controller.
When connecting multiple system controllers, designate the system controller with many functions as the "Main", and set the system controllers with few functions as the "Sub".

Simple button arrangement

The F1 (Function 1) and the F2 (Function 2) button can be set as a run button of the following collective operation. (Setback/Schedule/Operation Mode/Temperature Correction/Remote Controller Prohibition)

Functions

[Basic Functions]

- ON/OFF
- Operation mode switching
- Temperature setting
- Fan speed setting
- Airflow direction setting
- Louver setting

Advanced Functions

□: Each unit ○: Each group ◎: Group or collective ×: Not available

Item	Description	Operations	Display
Permit / Prohibit	The ON/OFF, operation mode, setting temperature, fan speed, air direction, filter sign reset operations, and timer using the local remote controllers can be prohibited. Only ON/OFF and filter reset can be prohibited for the LOSSNAY group. *The settable items vary depending on the models.	◎	◎
Operation lock	The operation lock can be set to the input operation of AT-50B. Each button can be set. (Function Button 1, Function Button 2, Collective ON/OFF, Touch Panel) Each function can be set. (Operation mode, Setting temperature, Fan speed, Menu button) The password for the lock release can be set.	◎	◎
Error display	When an error is currently occurring on an air conditioner unit, the afflicted unit and the error code are displayed. * When an error occurs, the "ON/OFF" LED flashes. The operation monitor screen show abnormal icon over the unit. The error monitor screen shows the abnormal unit address and error code. The error log monitor screen shows the time and date, the abnormal unit address, error code and source of detection.	×	□◎
Ventilation (independent)	Switches the mode "Bypass/Heat recovery/Auto" for LOSSNAY groups.	◎	◎
Ventilation (interlocked)	The LOSSNAY will run in interlock with the operation of indoor unit. The mode cannot be changed. The LED will turn ON during operation after interlocking.	◎	◎
Temperature-set limitation	Batch-setting to temperature range limit at cooling, heating, and auto mode. This function cannot be used with the MA remote controller. (Depends on the indoor unit model.)	◎	◎
Specific mode operation prohibit (Cooling prohibit, heating prohibit, cooling/ heating prohibit)	When set as the main controller, operation of the following modes with the local remote controllers can be prohibited. When cooling is prohibited: Cooling, dry, automatic can not be chosen. When heating is prohibited: Heating, automatic can not be chosen. When cooling/heating is prohibited: Cooling, dry, heating, automatic can not be chosen.	◎	◎
External input (Emergency stop input, etc.)	The following input with level signals or pulse signals are available. Level signal: "Emergency stop input" or "Collective ON/OFF" Pulse signal: "Collective ON/OFF" or "Local remote controller prohibit/permit" One input can be selected from those above. * An external input/output adapter (PAC-YT41HAA (sold separately)) is required. Relays and DC power supply or other devices must be prepared at the site.	◎	◎
External output (Error output, operation output)	"ON/OFF" and "error/normal" are output with the level signal. * An external input/output adapter (PAC-YT41HAA, PAC-YT51HAA (sold separately)) is required. Relays and DC power supply or other devices must be prepared at the site.	◎	◎
Checking the Gas Amount	Use this function to check for refrigerant leak from the outdoor unit. * When this function is used, the gas amount checking function of the outdoor unit cannot be used. This function is for CITY MULTI R2 and Y (PUMY is excluded.) series only.	□	□
Schedule operation	Weekly schedule setting up to 12 pattern is available. In one pattern, up to 16 setting of "ON/OFF", "Operation mode", "Set Temperature", "Fan speed", "Air flow direction" and "Permit / Prohibit local operation" can be scheduled. Two types of weekly schedule(Summer/Winter) can be set. Today's schedule setting up to 5 pattern in available.	○	○

* Depending on the installation conditions, power supply unit (PAC-SC51KUA) is required. Please contact your local distributor or MITSUBISHI ELECTRIC branch office for further information.

Centralised Remote Controller

Centralised controller AE-200E/AE-50E

NEW

Dimensions: 284(W) x 200(H) x 65(D) mm
: 11-5/32(W) x 7-27/32(H) x 2-9/16(D) in.

Dual Set Point

- **Comprehensively showing the energy consumption of air-conditioning equipment, assisting in energy saving.**
  - Energy consumption of air-conditioning equipment by individual area is displayed using graphs for easier viewing.
  - Enables comparisons with the previous year's power consumption as well as with the target electric power, thus allowing users to check the operating state at a glance.
  - Floor layout is displayed on the 10.4-inch LCD touch panel, facilitating easier operation of air-conditioning equipment.
- **In an easy and flexible manner, an optimum system can be established according to the scale of facilities.**
  - Implements control on up to 50 indoor units of air-conditioning equipment.
  - By using three units of expansion controller "AE-50E", the centralised control is implemented for the maximum of 200 indoor units.
  - Connection with PC allows implementation of control on more than 200 indoor units via Web browser.*1

  *1. Please contact your local distributor for when the feature is supported.
- **Features for operating and monitoring the hot water heat pump are also available on CAHV, PWFY, and CRHV.*2**
  - Centralised batch control on CAHV, PWFY, and CRHV *2 is possible in addition to that on air-conditioning unit.

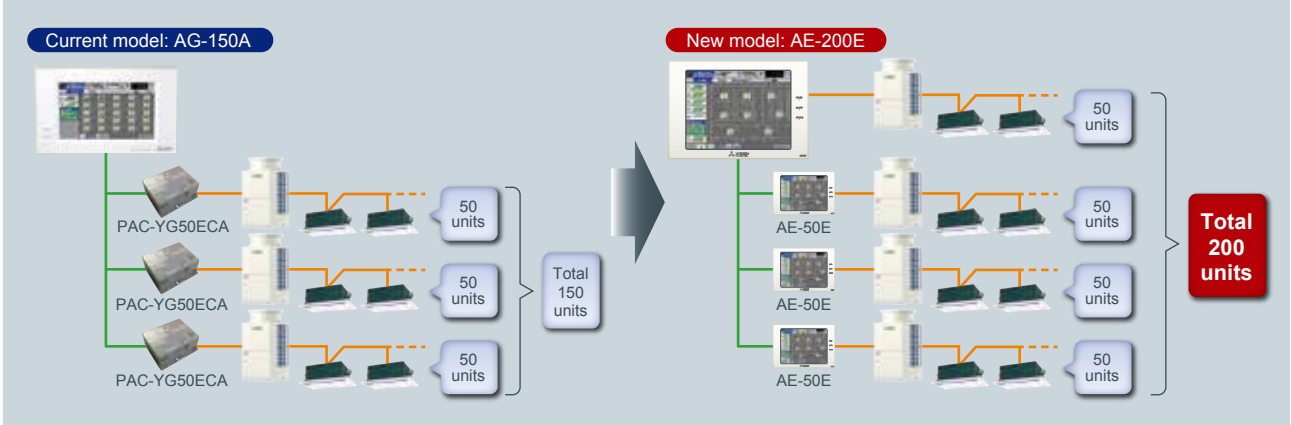
  *2. Please contact your local distributor for when these features are supported on CRHV.

Control Screen for Power Consumption

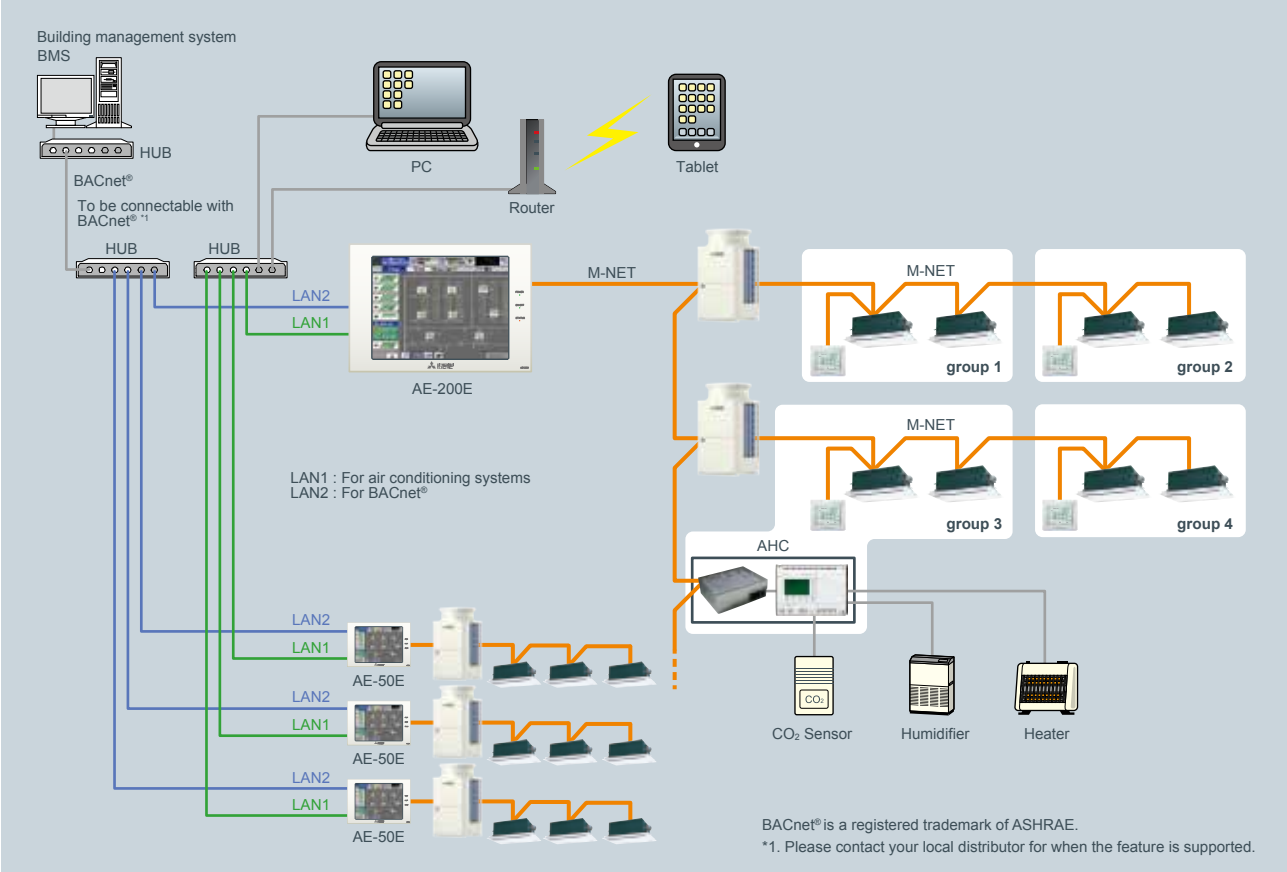
Energy consumption of applicable area is displayed by the month, day, and hour.
Energy consumption of two different units, groups and blocks can be compared.
Fan operation time as well as energy consumption can be displayed.

Energy consumptions of air-conditioning equipment are ranked and displayed by individual air-conditioning equipment and by area, thus visualising high-load components. Also, comparison of energy consumption with target electric energy is possible.

Comparison in the number of connectable units



System Structure



Functions

□ : Each unit ○ : Each group ● : Each block △ : Each floor ◎ : Collective × : Not available

Item	Description	Operations	Display
Controllable number of unit	Up to 50 units/50 groups		
ON/OFF	ON and OFF operation for the air conditioning units and general equipment. (To operate general equipment, PAC-YG66DCA is required.)	○ ◎ △ ●	○ ◎
Operation mode	Switches between several operation modes depending on the air conditioning unit. Air conditioning unit : Cool/Dry/Auto(*)/Fan/Heat LOSSNAY unit : Heat Recovery/Bypass/Auto CAHV, CRHV, Air To Water (PWFY) units : Heating, Heating ECO, Hot Water, Anti-freeze, Cooling(**) * Auto mode is for CITY MULTI R2 and WR2 series only. ** Only PWFY	○ ◎ △ ●	○
Temperature setting	Cool/Dry : 19°C (67°F) -35°C (95°F) [14°C (57°F) -30°C (87°F)] Heat : 4.5°C (40°F) -28°C (83°F) [17°C (63°F) -28°C (83°F)] Auto : 19°C (67°F) -28°C (83°F) [17°C (63°F) -28°C (83°F)] The range of temperature depends on the air conditioning unit. [ ] in case of using middle-temperature on PDFY, PEFY-VML/VMR/VMS/VMH-by setting DipSW7-1 to ON. Yet, PEFY-P-VMH-E-F is excluded.	○ ◎ △ ●	○
Fan speed setting	Models with 4 air flow speed settings : Hi/Mid-2/Mid-1/Low Models with 3 air flow speed settings : Hi/Mid/Low Models with 2 air flow speed settings : Hi/Low Fan speed setting (including Auto) varies depending on the model.	○ ◎ △ ●	○
Air flow direction setting	Air flow direction angles, 4-angles or 5-angles Swing, Auto (Louver cannot be set)	○ ◎ △ ●	○
Schedule operation	Weekly schedule can be set by groups based on daily operation pattern.	○ ◎ △ ●	○
Permit/prohibit local operation	Individually prohibits operation of each local remote controller function. (ON/OFF, Operation mode, Set temperature, Filter sign reset, Air Direction*, Fan Speed*, Timer*) * This function depends on the model.	○ ◎ △ ●	○
Indoor unit intake temperature	Measures the intake temperature of the indoor unit only when the indoor unit is operating.	×	○
Error	When an error is currently occuring on an air conditioning unit, the afflicated unit and the error code are displayed.	×	□ ◎
Test run	This operates air conditioning units in test run mode.	○ ◎ △ ●	○
Ventilation interlock	The ventilation unit (LOSSNAY) is able to automatically start its operation when operation of the interlocked indoor unit starts.	○ ◎ △ ●	○
External input/output	By using optional external input/output adapter (PAC-YG10HA-E) you can set and monitor the following. Input : By level signal : "Batch ON/OFF", "Batch emergency stop" By pulse signal : "Batch ON/OFF", "Enable/disable local remote controller" Output : "ON/OFF", "Error/Normal"	◎	◎
Energy Management	Bar Graph : Indoor unit Electric Energy, FAN operation time, Thermo-ON time (TOTAL, Cooling, Heating) can be displayed hourly, daily and monthly. Line Graph : Outdoor temp., Room temp., Set temp. (Heating, Cooling) input from PAC-YG63MCA and temp. from AHC.	×	□ ○ ●
Advanced HVAC Controller (AHC)	The status of AHC can only be monitored.	×	○
New Smart ME contoroller	The status of sensor on this controller can be monitored.	×	○
Smartphone/Tablet	The specified Web browser on iOS and Android OS can monitor and operate AE-200E. *1	○	○
New Web design	The web screen design is renewed for user friendly interface. *1	○ ◎ △ ●	○
Initial setting software	The initial setting can be configured without the connection of AE-200E. *1	×	×
Apportionment of power consumption	Apportionment of power consumption can be calculated on AE-200 without TG-2000A. *1	●	□ ●
BACnet® communication	ANSI/ASHRAE 135-2010 (ISO16484-5) is supported and approved by the BTL. *1	○	×

*1. Please contact your local distributor for when the feature is supported.

Centralised Remote Controller

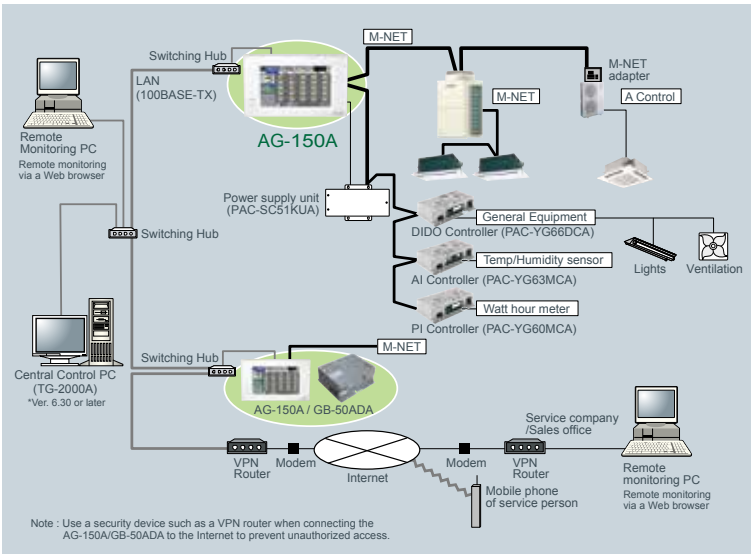
With a new coloured touch panel, and continuation of all the G-50A functions, the AG-150A allows for both basic control and advanced operations, for the ultimate controller.

Centralised controller AG-150A

Dimensions: 300(W) x 185(H) x 70.3(D) mm
: 11-13/16(W) x 7-5/16(H) x 2-13/16(D) in.

Option : Black surface cover
PAC-YG71CBL

System structure

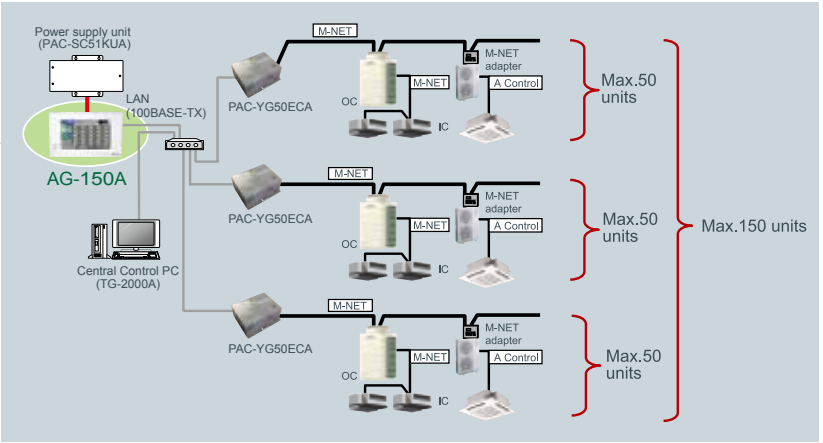


Expansion Controller PAC-YG50ECA

Dimensions: 250(W) x 217(H) x 97.2(D) mm
: 9-7/8(W) x 8-9/16(H) x 3-7/8(D) in.

With the connection of an Expansion Controller, maximum of 150 units/groups can be connected to AG-150A.

System structure



*Do not connect PAC-YG50ECA to TB3 of the outdoor unit.
*Use a security device such as a VPN router when connecting the AG-150A etc. to the Internet to prevent unauthorized access.

Design

Backlit colour liquid crystal display
Backlight makes it easy to see and control units.
One can identify whether a unit is ON or OFF from a distance.
Control at night or where there are no lights is possible.

Touch panel
9 inch wide, high-resolution
Touch panel enables operation of units by touching with index finger.
When object unit is touched, orange box appears around the unit icon indicating the unit selected.

Flat back
Easy installation
Allows for an installation of the unit either directly to the wall surface* or using the installation hole in the wall.
*Optional parts are required.

USB memory compatible
Measurement/initial setting CSV data extractable with USB memory.
Can save and overwrite setting data.

Functions

Controllable units/groups
Controls up to 50 units/groups (including indoor units, LOSSNAY, DIDO/AI/PI controller)
Up to 150 units can be controlled via expansion controller;PAC-YG50ECA (AG-150A software needs to be upgraded to Ver. 2.10 or later.)

Monitoring functions
Temperature/Humidity (using AI controller)
General equipment such as lights on LCD (using DIDO controller)
Interlock function from AI controller, DIDO controller to indoor units and between DIDO units are available.
AG-150A interlock with DIDO controller or free contact on an indoor unit available. * Ver. 2.30 or later

Energy saving functions
Seasonal scheduling and automatic switch over *1
Yearly scheduling on LCD *1
Scheduling fan speed and airflow direction
Optimised Start up
External temperature interlock control
Night setback control
*1 License required.

Functions

□ : Each unit ○ : Each group ● : Each block △ : Each floor ◎ : Collective × : Not available

Item	Description	Operations	Display
Controllable unit	50 units/groups or 150 units/groups via expansion controller; PAC-YG50ECA.		
ON/OFF	Run and stop operation for the air conditioner units and general equipment. (To operate general equipment, PAC-YG66DCA is required.)	○ ◎ △ ●	○ ◎
Mode selection	Switches between Cool / Dry / Auto / Fan / Heat. (Group of LOSSNAY unit : automatic ventilation/ vent - heat interchange/ normal ventilation) depending on the air conditioner unit. Auto mode is for CITY MULTI R2 and WR2 series only.	○ ◎ △ ●	○
Temperature setting	Cool/Dry : 19°C-30°C (14°C-30°C) / 67°F-87°F(57°F-87°F) Heat : 17°C-28°C (17°C-28°C) / 63°F-83°F(63°F-83°F) Auto : 19°C-28°C (17°C-28°C) / 63°F-83°F(63°F-83°F) ( ) in case of using middle-temperature on PEFY-VML/VMR/VMS/VMH by setting DipSW7-1 to ON. Yet, PEFY-P-VMH-E-F is excluded.	○ ◎ △ ●	○
Fan speed setting	Models with 4 air flow speed settings: Hi/Mid-2/Mid-1/Low Models with 3 air flow speed settings: Hi/Mid/Low Models with 2 air flow speed settings: Hi/Low Fan speed setting (including Auto) varies depending on the model.	○ ◎ △ ●	○
Air flow direction setting	Air flow direction angles, 4-angle or 5-angle Swing, Auto (Louver cannot be set)	○ ◎ △ ●	○
Schedule operation	Annual/Weekly (5 types)/today schedule can be set for each group of air conditioning units. Optimized startup setting is also available.	○ ◎ △ ●	○
Permit / Prohibit local operation	Individually prohibit operation of each local remote control function (Start/Stop, Change operation mode, Set temperature, Reset filter).	○ ◎ △ ●	○
Indoor unit intake temperature	Measures the intake temperature of the indoor unit only when the indoor unit is operating.	×	○
Error	When an error is currently occurring on an air conditioner unit, the afflicted unit and the error code are displayed.	×	□ ◎
Test run	This operates air conditioner units in test run mode.	○ ◎ △ ●	○
Ventilation interlock	The ventilation unit (LOSSNAY) is able to automatically start its operation when operation of the interlocked indoor unit starts.	○ ◎ △ ●	○
External input/output	By using optional external input/output adaptor (PAC-YG10HA) you can set and monitor the following. Input : By level signal : "Batch start/stop", "Batch emergency stop" By pulse signal : "Batch start/stop", "Enable/disable local remote controller" Output : "Start/stop", "Error/Normal"	◎	◎

*NOTE: Operation and displayed content vary depending on the indoor unit model.
♦Future release schedule is subject to change without notice.

Centralised Remote Controller

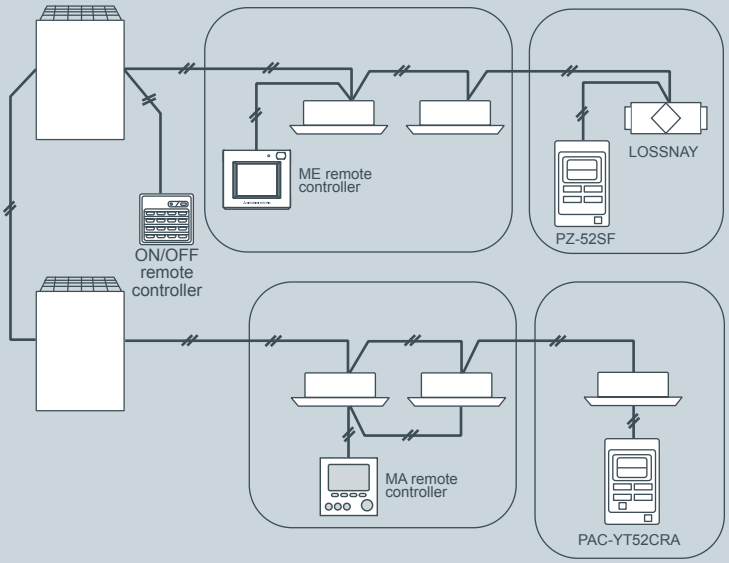
Just press a switch to start. All of the units can be On/Off by pressing the main switch, and each unit in the group can be On/Off with an individual switch. The PAC-YT40ANRA also has hardwired connection available (On/Off input, fire alarm input, run output, fault output).

ON/OFF remote controller PAC-YT40ANRA

Dimensions: 130(W) x 120(H) x 19(D) mm
: 5-1/8(W) x 4-23/32(H) x 3/4(D) in.

- **The group setting is kept in nonvolatile memory. No need to worry about re-setting after a power failure.**
- **No individual AC power supply is needed. The power can be supplied from one outdoor unit (R410A) or Power supply unit.**

System example



FUNCTION	DESCRIPTION	PAC-YT40ANRA	
UNITS	Max No.Units	50 units/16 groups	
		OPERATIONS	DISPLAY
ON/OFF	Run and stop operation	✓	✓
ERROR INDICATION	LED flashes during failure. (The error code can be confirmed by removing the cover.)	–	✓
VENTILATION OPERATION (INDEPENDENT)	Group operation of only LOSSNAY units possible. *Only ON/OFF of group.	✓	✓
VENTILATION OPERATION (INTERLOCKED)	The LOSSNAY will run in interlock with the operation of indoor unit. *The fan rate and mode cannot be changed. The LED will turn ON only during operation after interlocking.	✓	✓
EXTERNAL INPUT	On/Off/Fire Alarm *	✓	–
EXTERNAL OUTPUT	On/Off/Faults *	–	✓

* Applicable to collective only
Not applicable to groups

Centralised controller EB-50GU-J

EB-50GU-J (without display)
• Dimensions:9-7/8 (W) x 8-9/16 (H) x 3-7/8 (D) in.
:250 (W) x 217 (H) x 97.2 (D) mm

Java is a registered trademark of Oracle and/or its affiliates.

The Web Server Function enables Remote Operation or Scheduling Via a Web Browser on a Personal Computer.
Up to 50 indoor units can be controlled.

Web Browser

Enables monitoring and operation of indoor units using a PC with Microsoft® Internet Explorer (Ver.8 or Ver.9)

*When connecting to the Internet, please use the VPN (Virtual Private Network).

Using "Dial-up Connection"

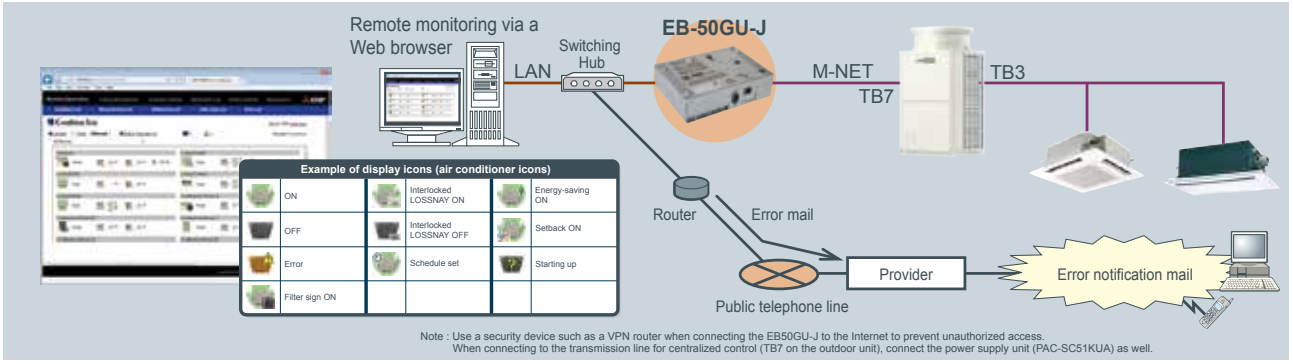
- Enables monitoring and operation remotely
- Enables error notification by e-mails to a PC or to a mobile phone

□:Each unit ○:Each group ●:Each block △:Each floor ◎:Collective ×:Not available

Function	Description	Operations	Display
ON / OFF	Run and stop operation for the air conditioner units	○●◎	○◎
Mode selection	Switches between COOL/DRY/FAN/AUTO/HEAT	○●◎	○
Temperature setting	The room temperature can be set for all floors or in block, floor or group units. Set temperature range COOL / DRY :19°C to 30°C / 66°F to 86°F HEAT :17°C to 28°C / 63°F to 82°F AUTO (single set point) :19°C to 28°C / 66°F to 82°F *Depend on the model AUTO (dual set points) [Cool] Same as the set temp. range for Cool mode. [Heat] Same as the set temp. range for Heat mode.	○●◎	○
Air flow direction setting	Air flow direction angles, 4-angle or 5-angle Swing, Auto (Louver cannot be set)	○●◎	○
Timer operation / Schedule	Annual/Weekly (5 types)/today schedule can be set for each group of air conditioning units. Optimized startup setting is also available.	○●◎	○
Permit / Prohibit function	Individually prohibit operation of each local remote control function	○●◎	○
Indoor unit intake temperature	Measures the intake temperature of the indoor unit only when the indoor unit is operating.	×	○
Error	When an error is currently occurring on an air conditioner unit, the afflicted unit and the error code are displayed.	×	□
Test run	This operates air conditioner units in test run mode.	○◎△●	○
Ventilation interlock	Operation of indoor groups or general equipment can be interlocked by the change of state (ON/OFF, mode, error of indoor groups and general equipment).	○	○
AHC status	Displays the status of input and output ports of each Advanced HVAC CONTROLLER (AHC).	×	□
Energy Use Status	On the Energy Use Status screen, the energy-control-related status, such as electric energy consumption, operation time, and outdoor temperature, can be displayed in a graph. Operators can check the detailed status of given indoor units by specifying the date to display the data per group, block, or unit address.	×	□○●

*NOTE: Operation and displayed content vary depending on the indoor unit model.

System Structure (image)

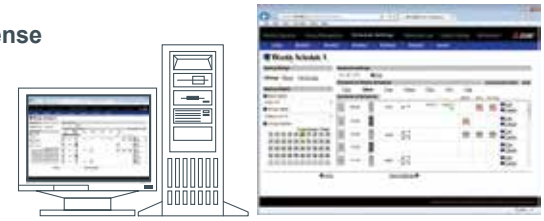


Note : Use a security device such as a VPN router when connecting the EB50GU-J to the Internet to prevent unauthorized access.
When connecting to the transmission line for centralized control (TB7 on the outdoor unit), connect the power supply unit (PAC-SC51KUA) as well.

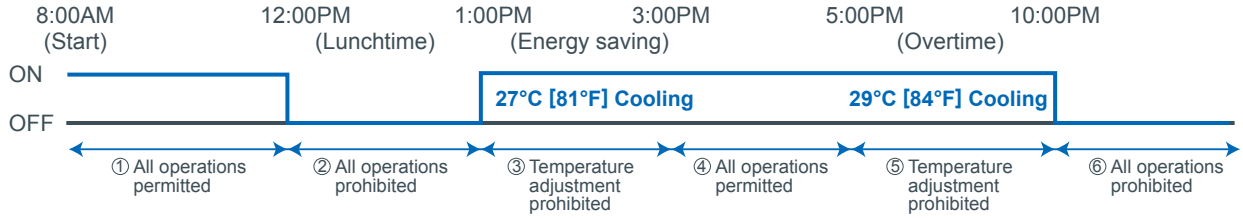
Annual / Weekly Schedule

Enables Weekly and Annual scheduling with a registering license

- The operations that can be scheduled for air conditioning unit group: ON/OFF/Optimised Start, Mode, Set Temp, Air Direction, Fan Speed, and Prohibit Remote Controller operation
- For annual schedule, it is possible to set 50 day-long settings up to 24 months into the future.



Scheduling example in the office



Up to 24 operation settings per day in 1-minute increment

Centralized controller GB-50ADA-J*

*GB-50ADA-J is indicated as GB-50ADA.

GB-50ADA-J (without display)
• Dimensions:250 (W) x 217 (H) x 97.2 (D) mm
:9-7/8 (W) x 8-9/16 (H) x 3-7/8 (D) in.

The Web Server Function enables Remote Operation or Scheduling Via a Web Browser on a Personal Computer.
Up to 50 indoor units can be controlled.

Web Browser

Enables monitoring and operation of indoor units using a PC with Microsoft® Internet Explorer (Ver.6 or 7 or 8) (Web browser function is an optional and needs license registration.)

*When connecting to the Internet, please use the VPN (Virtual Private Network).

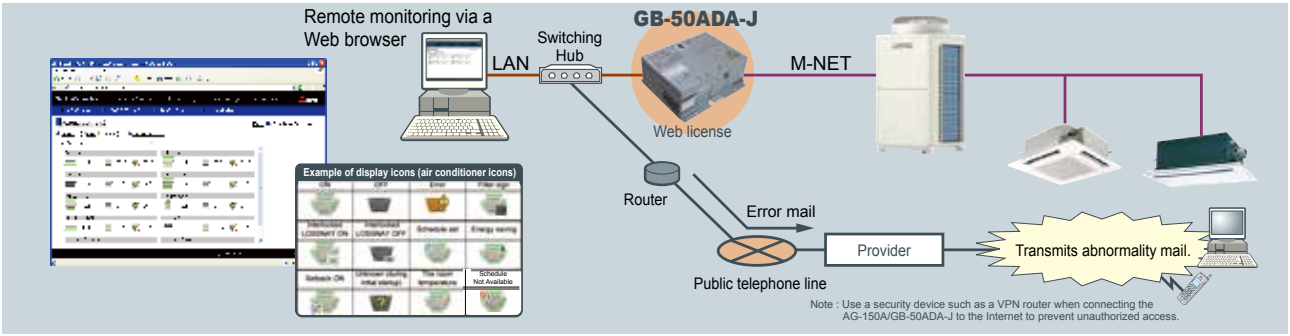
Using "Dial-up Connection"

- Enables monitoring and operation remotely
- Enables error notification by e-mails to a PC or to a mobile phone

Function	Description
	GB-50ADA-J (web browser)
ON / OFF	Run and stop operation for the air conditioner units
Mode selection	Switches between Cool / Dry / Auto / Fan / Heat.
Temperature setting	The temperature can be set within the following range. Cool/Dry :19°C-30°C (14°C-30°C) / 67°F-87°F (57°F-87°F) Heat :17°C-28°C (17°C-28°C) / 63°F-83°F (63°F-83°F) Auto :19°C-28°C (17°C-28°C) / 67°F-83°F (63°F-83°F) ( ) in case of using middle-temperature on PEFY, PEFY-VML/VMR/VMS/VMH by setting DipSW7-1 to ON. Yet, PEFY-P-VMH-E-F is excluded. *Set temperature range varies depending on the model.
Air flow direction setting	Air flow direction angles, 4-angle or 5-angle Swing, Auto (Louver cannot be set)
Schedule operation	Annaul/Weekly (5 types)/today schedule can be set for each group of air conditioning units. Optimized startup setting is also available.
Permit / Prohibit function	Individually prohibit operation of each local remote control function
Indoor unit intake temperature	Measures the intake temperature of the indoor unit only when the indoor unit is operating.
Error	When an error is currently occurring on an air conditioner unit, the afflicted unit and the error code are displayed.
Test run	-
Ventilation interlock	Operation of indoor groups or general equipment can be interlocked by the change of state (ON/OFF, mode, error of indoor groups and general equipment).

*NOTE: Operation and displayed content vary depending on the indoor unit model.
License registration is necessary to perform each function on GB-50ADA-J.

System Structure

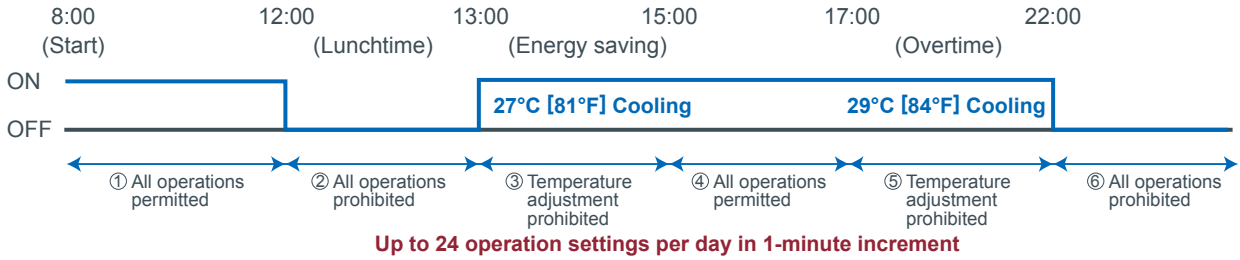


Annual / Weekly Schedule

Enables Weekly and Annual scheduling with a registering license

- The operations that can be scheduled for air conditioning unit group: ON/OFF/Optimized Start, Mode, Set Temp, Air Direction, Fan Speed, and Prohibit Remote Controller operation
- For annual schedule, it is possible to set 50 day-long settings up to 24 months into the future.

Scheduling example in the office



Up to 24 operation settings per day in 1-minute increment

Advanced HVAC Controller

PAC-IF01AHC-J + PLC

Dimensions: 116(W) x 90(H) x 40(D) mm
: 4-9/16(W) x 3-1/2(H) x 1-9/16(D) in.

Advanced HVAC Controller (hereafter referred to as AHC) comprises of Mitsubishi Electric's AHC Adapter (PAC-IF01AHC-J) and α2 Simple Application Controller* (hereafter referred to as ALPHA2).

*α2 Simple Application Controller is one of the Programming Logic Controllers that are manufactured by Mitsubishi Electric Corporation.

AHC allows for the connection of Mitsubishi Electric's air conditioning network system (hereafter referred to as M-NET) to other systems, which was not possible with the use of ALPHA2 alone. AHC provides the following functions.

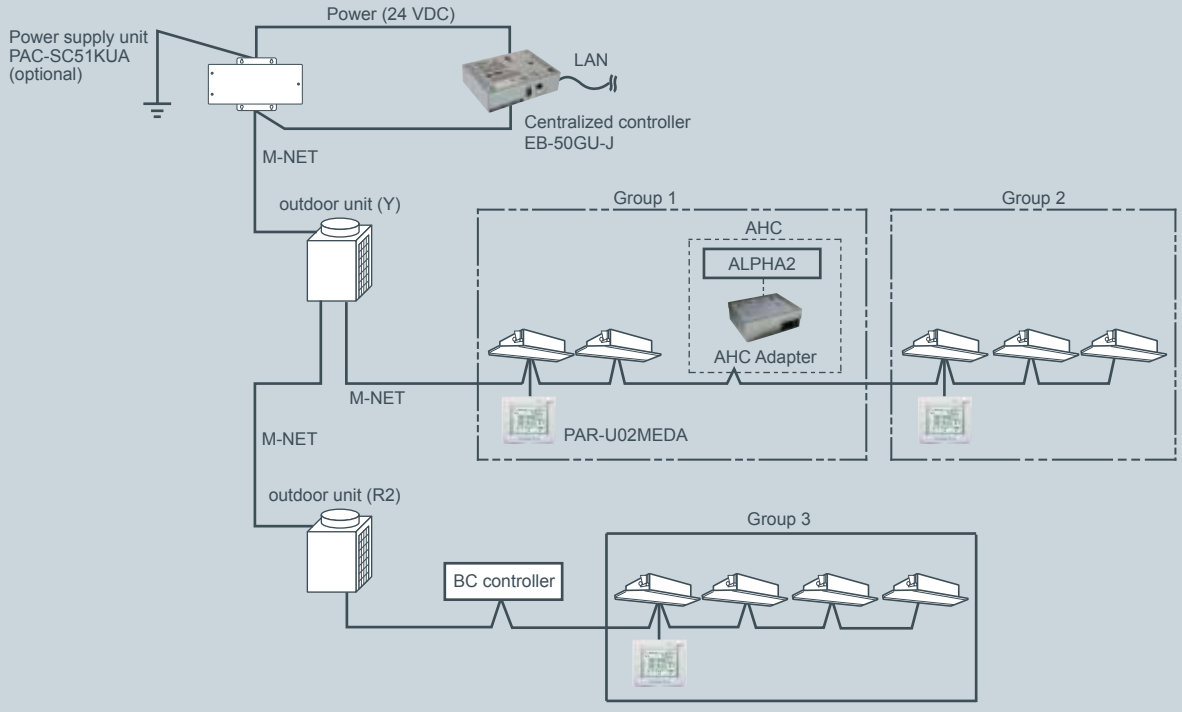
① Controls external devices using the sensor data of the air conditioning units connected to M-NET.
② Interlocks the operation of air conditioning units and external devices that are connected to ALPHA2.
③ Controls air conditioning units that are connected to M-NET.
④ Allows for the combined use of the items ①-③ above.
⑤ Monitors the input/output status of ALPHA2 via a remote controller or a centralised controller.

Compatible controllers

- Remote Controller: PAR-U02MEDA
- Centralized Controller: EB-50GU-J

* Refer to the manual that came with ALPHA2 for information about ALPHA2.
* The use of AHC ADAPTER requires either a remote controller or a centralised controller.

System Structure



Pulse, Digital and Analogue Control Modules

PI Controller PAC-YG60MCA

Dimension: 200(W) x 120(H) x 45(D) mm
: 7-7/8(W) x 4-3/4(H) x 1-13/16(D) in.

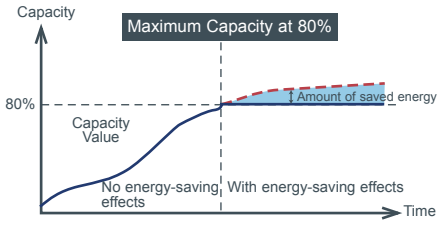
No more PLCs are needed!
Our new PI controller allows for energy saving without PLC, saving costs.
Maximum of 4 measurement meters (WHM, gas meter, water meter, calorie meter) can be connected to the PI controller and can be used also for charge calculation.
*24 VDC power needs to be provided on site.

Energy Saving Control (Peak Cut)

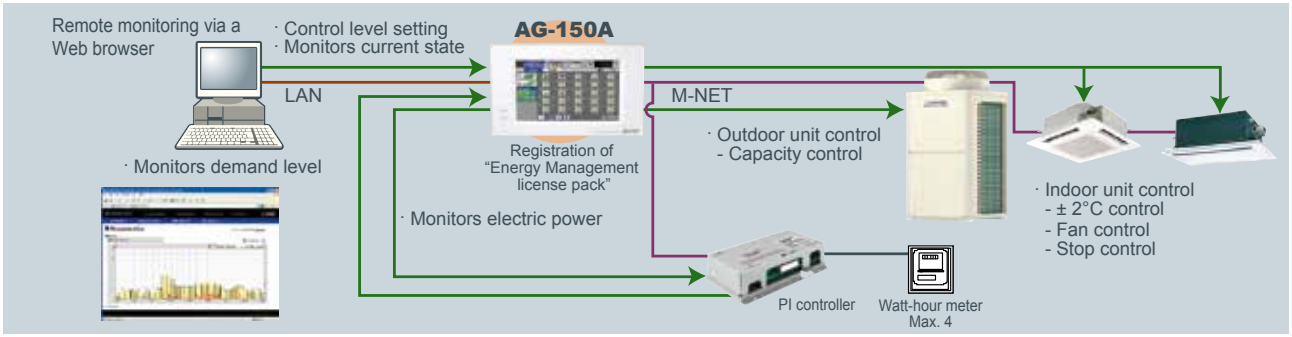
Enables Energy Saving Control with the use of our new PI controller. (Registration of "Energy Management license pack" is required.)

To perform energy saving, the capacity of the outdoor unit is controlled.

*Please note that when using an energy saving control, there are no warranties to failures such as usage over the contracted electricity.



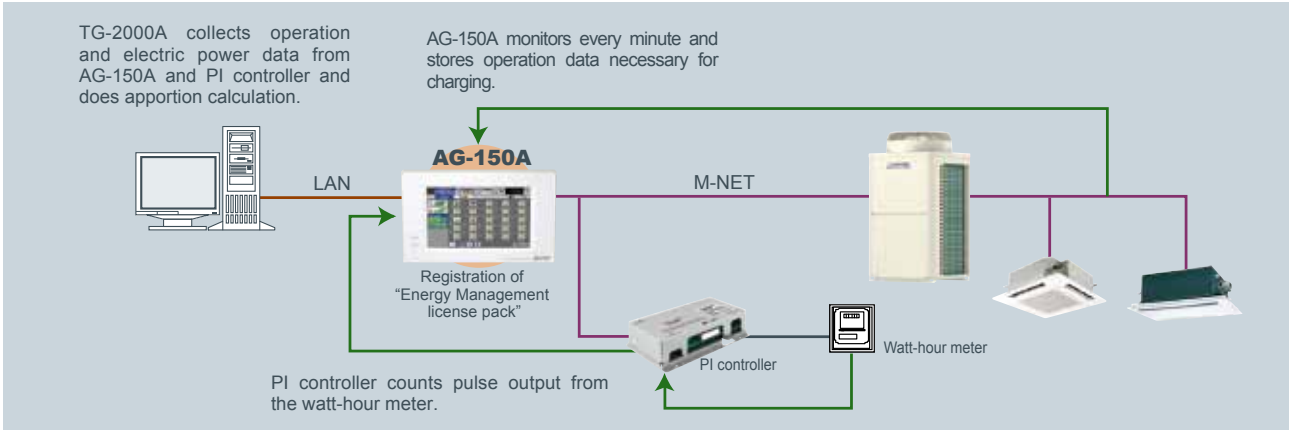
System Structure



Charge Calculation

Enables charge calculation for each tenant and output as CSV file

System Structure



DIDO Controller PAC-YG66DCA

Dimension: 200(W) x 120(H) x 45(D) mm
: 7-7/8(W) x 4-3/4(H) x 1-13/16(D) in.

No more PLCs are needed!
Our new DIDO controller makes it possible to control general-purpose equipment without PLC, saving costs.
Up to 6 general-purpose equipment can be connected to the DIDO controller.
*24 VDC power needs to be provided on site.

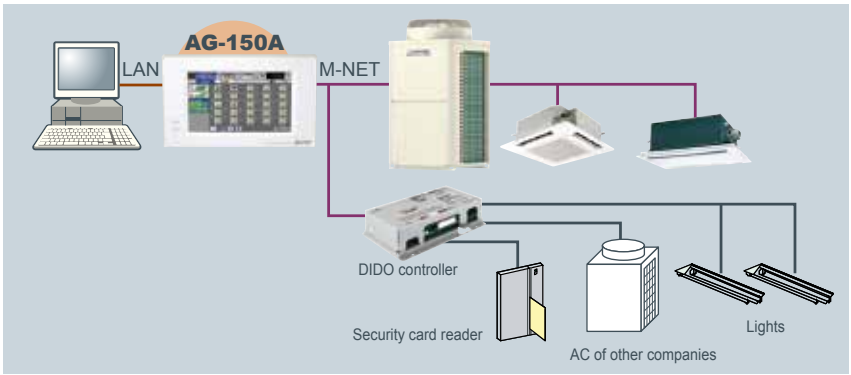
General-purpose equipment Control

Enables control and monitoring of equipment other than air-conditioners (air-conditioners of other companies, lights, ventilators, etc.)

- In addition to above, the air-conditioners can be interlocked with general-purpose equipment. E.g. Interlock between indoor units and security system.
- The indoor units can be turned ON/OFF when the security system is activated/deactivated.

Icon display (Lights)

System Structure



AI Controller PAC-YG63MCA

Dimension: 200(W) x 120(H) x 45(D) mm
: 7-7/8(W) x 4-3/4(H) x 1-13/16(D) in.

Our new AI controller makes it possible to monitor the values measured by the temperature/humidity sensor connected to the AI controller.
The AI controller has two input and two output channels.
*24 VDC power needs to be provided on site.

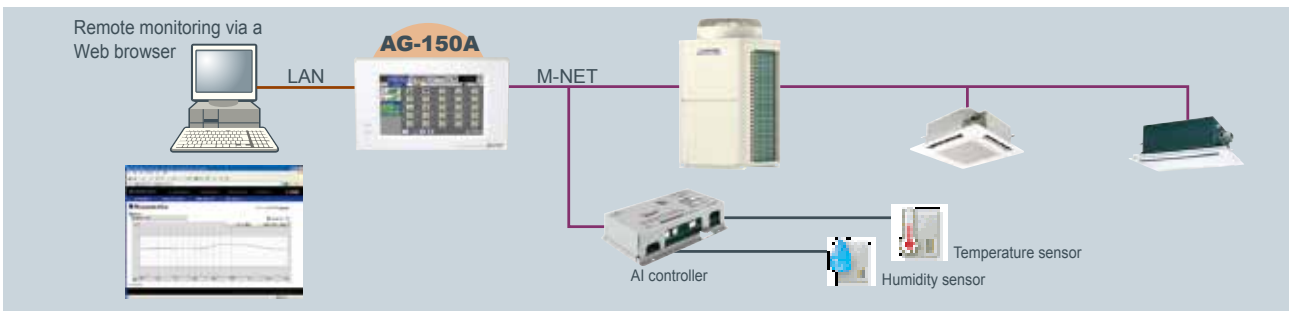
Temperature/Humidity Monitoring

Monitors the values measured by the temperature/humidity sensor connected to the AI controller

Temperature : Pt100, 4 to 20mA DC, 1 to 5 VDC, 0 to 10 VDC
Humidity : 4 to 20mA DC, 1 to 5 VDC, 0 to 10 VDC

- Trend displays of measurement data can be shown on a Web browser.
- An alarm can be output by e-mail when measurement data exceeds a preset upper or lower limit.

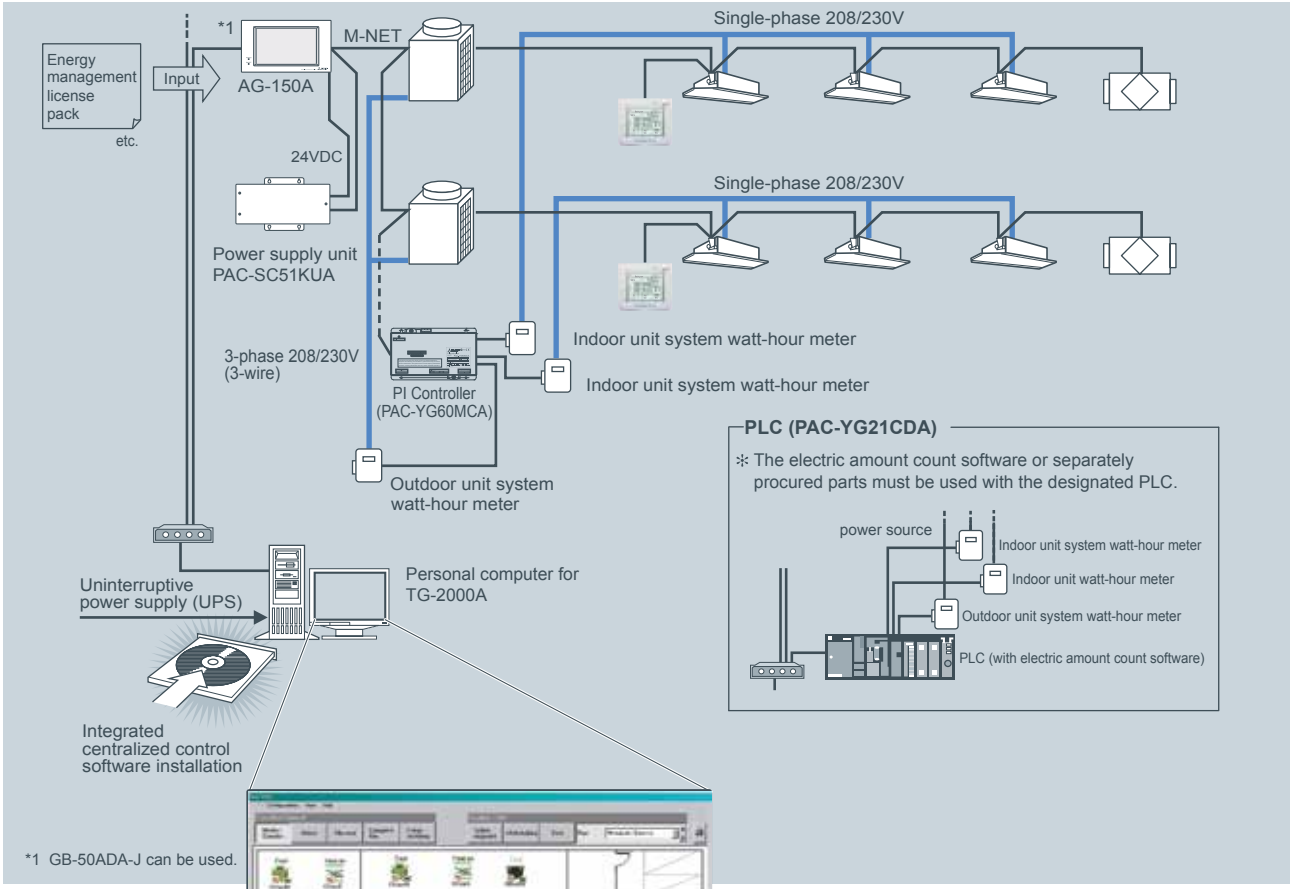
System Structure

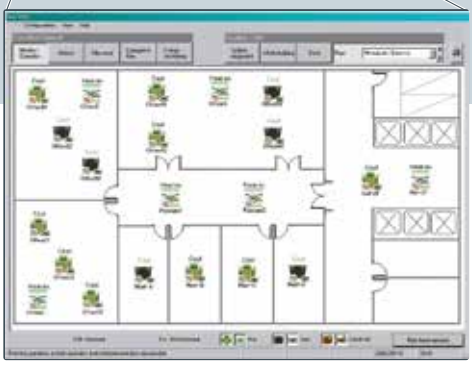


TG-2000 Computer

Integrated centralised control software TG-2000A

Example of Basic System Configuration





The air-conditioning layout can be displayed on the screen, making control and operation easier.

Effective use of TG-2000A

Multiple air conditioning charges in multiple buildings can be calculated. The power apportionment percentage data and apportioned power rate can be calculated for each unit, and can be output as a CSV file.

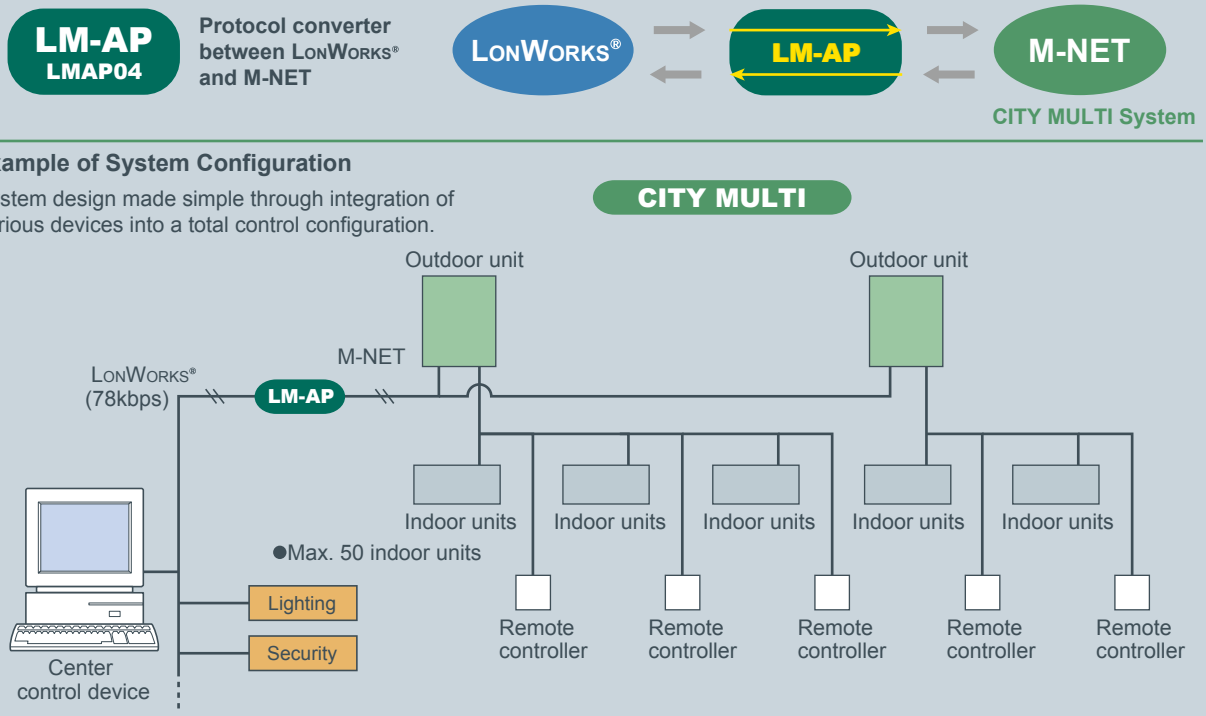
For example, installing TG-2000A to the system in the headquarters makes it possible to control AG-150A/GB-50ADA-J units that are used in branch offices.

BMS Interface Modules

LonWorks® (LMAP04)

CITY MULTI can easily combine into a Building Management System (BMS) via the LonWorks® and M-NET adapter LMAP04. LonWorks® is an opened transmission protocol widely used at BMS, and related equipment control.
CITY MULTI is therefore compatible with large-scaled BMS management via LonWorks®.

One LM ADAPTER unit can connect up to 50 Groups/50 indoor units.
Using a single LonWorks® adapter (LM-AP), you can connect up to a maximum of 50 indoor units.



LonWorks®
The building management system is connected to the CITY MULTI air conditioning system using LonWorks®, which is widely used on field networks, allowing for an open network and savings in construction to face.

Lon, LonWorks® and the Echelon logo are trademarks of Echelon Corporation registered in the United States and other countries.

LonWorks® INTERFACE

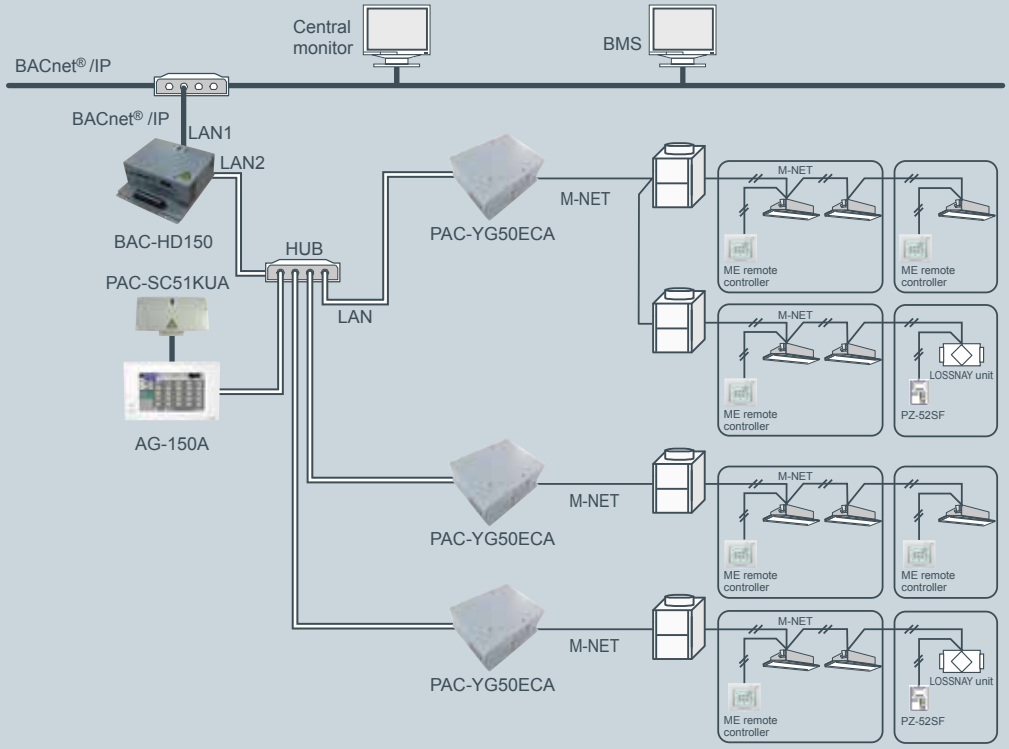
FUNCTION	CONTENT
Control	
ON/OFF	Run/Stop
Mode Operation	Cooling/Drying/Heating/Auto/Fan/Setback
Setpoint Adjustment	Cooling 19-35°C, Heating 4.5-28°C, Auto 19-28°C
Fan Speed Control	Lo-Mi1-Mi2-Hi
Permit/Prohibit	ON/OFF, Mode, Setpoint
Emergency Stop	-
Monitoring	
ON/OFF	Run/Stop
Mode	Cooling/Drying/Heating/Auto/Fan/Setback
Setpoint	Cooling 19-35°C, Heating 4.5-28°C, Auto 19-28°C
Fan Speed	Lo-Mi1-Mi2-Hi
Permit/Prohibit	ON/OFF, Mode, Setpoint
Alarm State	Normal/Abnormal
Room Temperature	-10°C~50°C
Thermo ON/OFF	ON/OFF

BACnet® (BAC-HD150)

CITY MULTI can easily combine into a Building Management System (BMS) via the BACnet® and M-NET adapter BAC-HD150. BACnet® is an opened transmission protocol widely used at BMS, and related equipment control. CITY MULTI is therefore compatible with large-scaled BMS management via BACnet®.

BAC-HD150 can control up to 50 units/groups (including LOSSNAY).
Up to 150 units/groups (including LOSSNAY) can be controlled from one BAC-HD150 with three expansion controllers PAC-YG50ECA. (50 units/PAC-YG50ECA)
When the dual-set-point function is used, no expansion controllers can be connected, and only up to 50 units/groups can be controlled from each BAC-HD150.

System example (Connection of 150 units / groups with PAC-YG50ECA)



BACnet® and M-NET adapter

FUNCTION	CONTENT
Operation	
ON/OFF	Run/Stop
Mode	Cool/Dry/Heat/Auto/Fan/Setback
Fan Speed	Low-Mid1-Mid2-Hi
Airflow Direction	Horizontal- 60°-80°-100°swing
Set Temperature	Cooling 19-35°C [67-95°F], Heating 4.5-28°C [40-83°F], Auto 19-28°C [67-83°F]
Filter Sign Reset	Normal/Reset
Permit/Prohibit	ON/OFF, Mode, Filter sign reset, Set temp.
Forced OFF	Release/Effective
Monitoring	
ON/OFF	Run/Stop
Mode	Cool/Dry/Heat/Fan/Setback
Fan Speed	Low-Mid1-Mid2-Hi
Air Direction	Horizontal- 60°-80°-100°swing
Set Temperature	Cooling 19-35°C [67-95°F], Heating 4.5-28°C [40-83°F], Auto 19-28°C [67-83°F]
Filter Sign	Normal/Reset
Permit/Prohibit	ON/OFF, Mode, Filter sign reset, Set temp.
Indoor Temperature	-
Alarm Signal	Normal/Abnormal
Error Code	2 Character code- Indicates all unit alarms
Communication State	Normal/Abnormal

Optional Parts

OPTIONAL PARTS FOR INDOOR UNITS

>>4-way cassette type (PLFY-VBM/VCM)

Description	Model	Applicable capacity	
		VBM	VCM
Decoration panel	SLP-2AAW/SLP-2ALW	–	P20, P25, P32, P40
	PLP-6BA	P20, P25, P32, P40, P50, P63, P80, P100, P125	–
Automatic Filter Elevation Panel	PLP-6BAJ	P20, P25, P32, P40, P50, P63, P80, P100, P125	–
Multi-functional casement	PAC-SH53TM-E	P20, P25, P32, P40, P50, P63, P80, P100, P125	–
High-efficiency filter element	PAC-SH59KF-E	P20, P25, P32, P40, P50, P63, P80, P100, P125	–
Wireless signal receiver	PAR-SA9FA-E	P20, P25, P32, P40, P50, P63, P80, P100, P125	–
Space panel	PAC-SH48AS-E	P20, P25, P32, P40, P50, P63, P80, P100, P125	–
“i-see” sensor	PAC-SA1ME-E	P20, P25, P32, P40, P50, P63, P80, P100, P125	–
Duct flange for fresh air intake	PAC-SH65OF-E	P20, P25, P32, P40, P50, P63, P80, P100, P125	–
Shutter plate	PAC-SH51SP-E	P20, P25, P32, P40, P50, P63, P80, P100, P125	–

>>2-way cassette type (PLFY-VLMD)

Description	Model	Applicable capacity
Decoration panel	CMP-40VLW-C	P20, P25, P32, P40
	CMP-63VLW-C	P50, P63
	CMP-100VLW-C	P80, P100
	CMP-125VLW-C	P125
OA duct flange	PAC-KH11OF	P20, P25, P32, P40, P50, P63, P80, P100

>>1-way cassette type(PMFY-VBM)

Description	Model	Applicable capacity
Decoration panel	PMP-40BM	P20, P25, P32, P40

>>Ceiling concealed type (PEFY-VMH(S))

Description	Model	Applicable capacity	Remarks
Drain pump	PAC-KE04DM-F	P40~P250	
	PAC-KE05DM-F	P200, P250	
Long life filter	PAC-KE86LAF	P40, P50, P63	
	PAC-KE88LAF	P71, P80	
	PAC-KE89LAF	P100, P125, P140	
	PAC-KE85LAF	P200, P250	
Filter box	PAC-KE63TB-F	P40, P50, P63	Necessary when long life filter is used
	PAC-KE80TB-F	P71, P80	
	PAC-KE140TB-F	P100, P125, P140	
	PAC-KE250TB-F	P200, P250	

>>Ceiling concealed type (PEFY-VMA(L))

Description	Model	Applicable capacity
Filter box	PAC-KE91TB-E	P20, P25, P32
	PAC-KE92TB-E	P40,P50
	PAC-KE93TB-E	P63, P71, P80
	PAC-KE94TB-E	P100, P125
	PAC-KE95TB-E	P140

>>Fresh air intake type (PEFY-VMH-E-F)

Description	Model	Applicable capacity
Long life filter	PAC-KE88LAF	P80
	PAC-KE89LAF	P140
	PAC-KE85LAF	P200, P250
Filter box	PAC-KE80TB-F	P80
	PAC-KE140TB-F	P140
	PAC-KE250TB-F	P200/P250
Drain pump	PAC-KE04DM-F	P80, P140, P200, P250

>>Ceiling suspended type (PCFY-VKM)

Description	Model	Applicable capacity
Drain pump kit	PAC-SH83DM-E	P40
	PAC-SH84DM-E	P63,100,125
High efficiency filter	PAC-SH88KF-E	P40
	PAC-SH89KF-E	P63
	PAC-SH90KF-E	P100,125
Wireless remote controller kit	PAR-SL94B-E	P40,63,100,125

>>Ceiling concealed type (PEFY-VMS1(L))

Description	Model	Applicable capacity	
Drain pump	PAC-KE07DM-E	P15, 20, 25, 32, 40, 50, 63	*For PEFY-VMS1L only
Control box replace kit	PAC-KE70HS-E	P15, 20, 25, 32, 40, 50, 63	

>>Wall mounted type (PKFY-VBM/VHM/VKM)

Description	Model	Applicable capacity
External LEV Box	PAC-SG95LE-E	P15, 20, 25, 32, 40, 50, 63
Drain pump kit	PAC-SH75DM-E	P32, 40, 50
	PAC-SH94DM-E	P63,100

OPTIONAL PARTS FOR OUTDOOR UNITS

>>For PUMY series

Description	Model
Branch Pipe (2 Branch)	CMY-Y62-G-E
Header	CMY-Y64-G-E
Header	CMY-Y68-G-E
Drain Socket	PAC-SG61DS-E
Centralized Drain Pan	PAC-SH97DP-E
Port Connector (ø9.52 → ø12.7)	PAC-SG73RJ-E
Port Connector (ø15.88 → ø19.05)	PAC-SG75RJ-E
Air Protect Guide (2 pcs required)	PAC-SH95AG-E
Air Outlet Guide	PAC-SH96SG-E

>>For PUHY series

Description	Model	Remarks
Twinning kit	CMY-Y100VBK3	For PUHY-P400~P650YSKB / EP500~EP600YSLM
	CMY-Y200VBK2	For PUHY-P700~P900YSKB
	CMY-Y300VBK3	For PUHY-P950~P1350YSKB / EP650~EP1350YSLM
Branch pipe (Joint)	CMY-Y102SS-G2	200 or below (Total capacity of indoor unit)
	CMY-Y102LS-G2	201-400 (Total capacity of indoor unit)
	CMY-Y202S-G2	401-650 (Total capacity of indoor unit)
		The 1st branch of P400~P650YSKB / EP400~EP600YSLM
	CMY-Y302S-G2	651 or above (Total capacity of indoor unit)
		The 1st branch of P700~P1350YSKB / EP650~EP1350YSLM
Branch pipe (Header)	CMY-Y104-G	For 4 branches
	CMY-Y108-G	For 8 branches
	CMY-Y1010-G	For 10 branches
Relay box	PAC-BH02KTY-E	Relay box should be used together with Base heater PAC-BH-EHT-E.
Base heater	PAC-BH04EHT-E	For S Module
	PAC-BH05EHT-E	For L Module
	PAC-BH06EHT-E	For XL Module

Note : Indoor unit capacities: the capacity of an indoor unit is the same as the number used for its type identification.

>>For PURY series

Description	Model	Remarks
Twinning kit	CMY-R100VBK-A	For PURY-P400~P500YSLM
	CMY-R100VBK2	For PURY-P550~P650YSLM
	CMY-ER100VBK-A	For PURY-EP500YSLM
	CMY-R200VBK2	For PURY-P700~P800YSLM
	CMY-ER200VBK	For PURY-EP550~EP900YSLM
	CMY-R200XLVBK	For PURY-P850~900YSLM
Branch pipe (Joint)	CMY-Y102SS-G2	200 or below (Total capacity of indoor unit)
	CMY-Y102LS-G2	201-400 (Total capacity of indoor unit)
	CMY-Y202S-G2	401-650 (Total capacity of indoor unit)
		The 1st branch of P450~P650
Relay box	PAC-BH02KTY-E	Relay box should be used together with Base heater PAC-BH-EHT-E.
Base heater	PAC-BH04EHT-E	For S Module
	PAC-BH05EHT-E	For L Module
	PAC-BH06EHT-E	For XL Module

Note : Indoor unit capacities: the capacity of an indoor unit is the same as the number used for its type identification.

>>For PQHY series

Description	Model	Remarks
Branch pipe (Joint)	CMY-Y102SS-G2	200 or below (Total capacity of indoor unit)
	CMY-Y102LS-G2	201-400 (Total capacity of indoor unit)
	CMY-Y202S-G2	401-650 (Total capacity of indoor unit)
		The first branch of P400-P600
	CMY-Y302S-G2	651 or above (Total capacity of indoor unit)
Branch pipe (Header)	CMY-Y104-G	For 4 branches
	CMY-Y108-G	For 8 branches
	CMY-Y1010-G	For 10 branches
Twinning kit	CMY-Y100VBK2	For PQHY-P400-P600YSHM-A
	CMY-Y300VBK2	For PQHY-P650-P900YSHM-A

>>For PQRY series

Description	Model	Remarks
Branch pipe (Joint)	CMY-Y102SS-G2	200 or below (Total capacity of indoor unit)
	CMY-Y102LS-G2	201-400 (Total capacity of indoor unit)
	CMY-Y202S-G2	401-650 (Total capacity of indoor unit)
		The first branch of P400-P600
Twinning kit	CMY-Q100VBK	For PQRY-P400-P600YSHM-A

OPTIONAL PARTS FOR CONTROL

Model	Description
PAC-SE41TS-E	Remote Sensor for A/J/K/M-Net Control
PAC-SE55RA-E	Remote ON/OFF adaptor for Indoor Unit
PAC-SA88HA-EP	Remote Display Adaptor for Indoor Unit
PAC-SA89TA-EP	Timer Adaptor for remote controller
PAC-SC37SA-E	Output signal connector
PAC-SC36NA-E	Input signal connector
PAC-SF46EPA	Transmission booster
LMAP04-E	Air conditioner interface
PAC-YG11CDA	Electric amount count software
BAC-HD150	BAC net® and M-NET adapter

Model	Description
PAC-YT51HAA-J	External input/output adapter for AT-50B
PAC-YG10HA	External input/output adapter for AE-200E / AG-150A
PAC-YG50ECA	Expansion controller for AG-150A
PAC-SC51KUA	Power supply unit for AG-150A / GB-50ADA-J
PAC-YG81TB	Mounting attachment B type for AG-150A wall-mount installations
PAC-YG83UTB	Electric box for AG-150A wall-embed installations
PAC-YG84UTB	Electric box for AE-200E wall-embed installations
PAC-YG85KTB	Mounting attachment A type for AG-150A/PAC-SC51KUA wall-mount installations
PAC-YG86TK	Mounting attachment for AE-200E wall-mount installations
PAC-YG71CBL	Black surface cover for AG-150A

OPTIONAL EQUIPMENT FOR BC CONTROLLER

BC Controller Model	Junction pipe kit	Branch pipe
CMB-P104V-G1, GB1	CMY-R160-J1	CMY-Y102SS-G2
CMB-P105V-G1		
CMB-P106V-G1		
CMB-P108V-G1, GA1, GB1		
CMB-P1010V-G1, GA1		
CMB-P1013V-G1, GA1		
CMB-P1016V-G1, GA1, HA1, HB1		

Installation Information

1. General precautions

1-1. Usage

- The air conditioning systems described in this catalogue are designed and intended for human comfort, and are not designed for the preservation of food, animals, plants, precision equipment or art objects. Do not use the product for any purpose other than what it is designed for.
- Due to the risks associated with water leakage and electric shock, do not use the product for air conditioning vessels or vehicles.

1-2. Installation Environment

- Do not install the unit in an environment where the voltage fluctuates, or in commercial kitchen areas where large amounts of mineral oil (e.g. cutting oil) are present, or large amounts of steam are produced.
- Do not install the unit in an acidic or alkaline environment.
- Do not install the unit in locations which are exposed to chlorine or other corrosive gases. Avoid installation near sewers.
- To reduce the risk of fire, do not install the unit in a place where flammable gas may be leaked or inflammable material is present.
- This air conditioning unit has a built-in microcomputer, which must be considered when choosing the installation position as the unit may interfere with antenna or other electronic devices in the immediate area. It is recommended that the unit should be installed at a distance from these devices.
- The unit should be installed on a solid foundation according to local safety measures associated with extreme weather, wind gusts and earthquakes to prevent the unit from tipping or falling and incurring damage.

1-3. Backup System

- For air conditioning installations where a malfunction could exert critical influence, it is recommended that two or more systems of single outdoor with multiple indoor units are used as backup.

1-4. Unit Characteristics

- In areas where the outdoor temperature is low and the humidity is high, the heat exchanger on the outdoor unit will tend to collect frost, which can affect heating performance. To remove the frost, Auto-defrost function will be activated which will temporarily stop the heating mode for up to several minutes. Heating mode will automatically resume upon completion of the defrost process.
- Heat pump air conditioners require time to warm an entire room immediately after heating operation begins, requiring the indoor unit to circulate warm air to the entire space.
- The sound levels referred to in this catalogue were obtained from test results performed in an anechoic room. The sound levels during actual operation may vary from the simulated results due to ambient noise and acoustic characteristics of the room. Refer to the section “Sound Levels” in the Data Book for the actual measurement location.
- Depending on operating conditions, the unit can generate noise caused by valve actuation, refrigerant flow, and pressure changes during normal operation. It is not recommended that a BC controller is installed in locations where quietness is required (such as bedrooms).
- The total capacity of the connected indoor units can be greater than the capacity of the outdoor unit. However, when the indoor units operate simultaneously, each unit’s capacity may be reduced below the rated capacity.
- When the unit is started up for the first time within 12 hours after power on or after power failure, it will perform an initial start-up operation (capacity control operation) to prevent damage to the compressor. The initial start-up operation requires 90 minutes maximum to complete, depending on the operation load.

1-5. Relevant Equipment

- Use an earth leakage breaker (ELB) with medium sensitivity, and an activation speed of 0.1 seconds or less.
- Consult your local distributor or a qualified technician when installing an earth leakage breaker.
- Inverter air conditioners and heat pump units require an earth leakage breaker suitable for handling high harmonic waves and surges.
- Leakage current is generated not only through the air conditioning unit but also through the power wires. Therefore, the leakage current of the main power supply is greater than the total leakage current of each unit. Take into consideration the capacity of the earth leakage breaker or leakage alarm when installing one at the main power supply. To accurately measure the leakage current on site, use a measurement tool equipped with a filter, and clamp all four power wires together. The leakage current measure on the ground wire may not be accurate due to the leakage current from other systems being included in the measurement value.
- Do not install a phase advancing capacitor on a unit which is connected to the same power system as an inverter type unit and its equipment.
- If a large current is produced by either a product malfunction or faulty wiring, both the earth leakage breaker on the product as well as the upstream overcurrent breaker may trip simultaneously. Separate the power system or coordinate all the breakers according to the system's priority levels.

1-6. Unit Installation

- Consult your local distributor or a qualified technician to carry out installation of the unit. Installation by an unqualified person may result in water leakage, electric shock, or fire.
- Your local distributor or a qualified technician must carefully read the Installation Manual that is provided with each unit before carrying out installation work.
- Ensure there is adequate space around each unit's installation site.

1-7. Optional Accessories

- Only use accessories recommended by Mitsubishi Electric. Consult your local distributor or a qualified technician for installation. Installation by an unqualified person may result in water leakage, electric shock, or fire.
- Some optional accessories may not be compatible with the unit to be used, or may not be suitable for the installation conditions. Check the compatibility when considering any accessories.
- Note that some optional accessories may affect the unit's external appearance, weight, operating sound and other performance characteristics.

1-8. Operation/Maintenance

- Read the Instruction Book provided with each unit carefully before use.
- Maintenance or cleaning of each unit may be risky and therefore may require expertise. Refer to the Instruction Book to ensure safety. Consult your local distributor or a qualified technician when special expertise is required (such as when the indoor unit requires cleaning).

2. Precautions for Indoor unit

2-1. Operating environment

- The refrigerant (R410A) used for air conditioner is non-toxic and nonflammable. However, if the refrigerant leaks, the oxygen level may drop to harmful levels. If the air conditioner is installed in a small room, measures must be taken to prevent the refrigerant concentration from exceeding the safety limit even if the refrigerant should leak.
- If the units operate in the cooling mode at the humidity above 80%, condensation may collect and drip from the indoor units.

2-2. Unit characteristics

- The return air temperature displayed on the remote controller may differ from the ones on the other thermometers.
- The clock on the remote controller may be displayed with a time lag of approximately one minute every month.
- The temperature using a built-in temperature sensor on the remote controller may differ from the actual room temperature due to the effect of the wall temperature.
- Use a built-in thermostat on the remote controller or a separately-sold thermostat when indoor units installed on or in the ceiling operate the automatic cooling/heating switchover.
- The room temperature may rise drastically due to Thermo OFF in the places where the air conditioning load is large such as computer rooms.
- Be sure to use a regular filter. If an irregular filter is installed, the unit may not operate properly, and the operation noise may increase.
- The room temperature may rise over the preset temperature in the environment where the heating air conditioning load is small.

2-3. Unit installation

- For simultaneous cooling/heating operation type air conditioners (R2, WR2 series), the G-type BC controller cannot be connected to the 16HP outdoor unit model or above, and the G- and GA-type BC controllers cannot be connected to the 28HP model or above. The GB- and HB-type BC controllers (sub) cannot be connected to the outdoor unit directly, and be sure to use them with GA- and HA-type BC controllers (main).
- The insulation for low pressure pipe between the BC controller and outdoor unit shall be at least 20 mm thick. If the unit is installed on the top floor or in a high-temperature, high-humidity environment, thicker insulation may be necessary.
- Do not have any branching points on the downstream of the refrigerant pipe header.
- When a field-supplied external thermistor is installed or when a device for the demand control is used, abnormal stops of the unit or damage of the electromagnetic contactor may occur. Consult your local distributor for details.
- When indoor units operate a fresh air intake, install a filter in the duct (field-supplied) to remove the dust from the air.
- The 4-way or 2-way Airflow Ceiling Cassette Type units that have an outside air inlet can be connected to the duct, but need a booster fan to be installed at site. Refer to the chapter "Indoor Unit" in the Data Book for the available range for fresh air intake volume.
- Operating fresh air intake on the indoor unit may increase the sound pressure level.

3. Precautions for Fresh air intake type indoor unit

3-1. Usage

- This unit mainly handles the outside air load, and is not designed to maintain the room temperature. Install other air conditioners for handling the air conditioning load in the room.

3-2. Unit characteristics

- This unit cannot perform the drying operation. The unit will continue the fan operation and blow fresh air (air that is not air-conditioned) when the Heating Thermo-OFF or Cooling Thermo-OFF mode is selected.
- The fan may stop tentatively when the unit is connected to the simultaneous cooling/heating operation type outdoor unit (R2, WR2 series) or during the defrost cycle.
- This unit switches the Thermo ON or OFF depending on the room temperature. The outside air is directly supplied into the room during Thermo OFF. Take caution of the cold supply air due to low outside air temperature and of condensation in the room due to high humidity of the outside air.
- Outside air temperature ranges for the operation must be as follows:

  Cooling: 21ºCD.B./15.5ºCW.B. ~ 43ºCD.B./35ºCW.B.

  Heating: -10ºCD.B.~ 20ºCD.B

  The unit is forced to operate Thermo OFF (fan operation) when the outside air temperature is as follows.

  Cooling: 21ºCD.B or below; Heating: 20ºCD.B or above
- Either a remote controller (sold separately) or a remote sensor (sold separately) must be installed to monitor the room temperature.
- If only this unit is used as an indoor unit, condensation may form at the supply air grill while the unit is operated in the cooling mode. This unit cannot operate dehumidifying.
- Use the unit in the way that the airflow rate will not exceed the 110% of the rated airflow.

4. Precautions for Outdoor Unit / Heat Source Unit

4-1. Installation Environment

- Outdoor units with salt-resistant specification are recommended in coastal areas or regions subject to salt air.
- Outdoors with salt-resistant specification are still not entirely protected against all forms of corrosion. Be sure to follow the directions and precautions outlined in the Instruction Manual and Installation Manual for correct maintenance. The salt-resistant specification adheres to the guidelines published by JRAIA (JRA9002).
- Install the unit in a place where discharge airflow is unobstructed. Obstruction of airflow may result in the short-cycling of discharge air.
- Ensure proper drainage is provided around the unit base to avoid condensation and/or water build-up. Water-proof protection should be applied to the floor when installing units on rooftops.
- In regions subject to snow and ice, install the unit so that the outlet faces away from the prevailing wind direction and install a snow guard to protect the unit from snow. Refer to the installation manual for the snow guard and take care when installing to avoid the risk of corrosion to the outdoor unit. The unit should be mounted on a base approximately 50cm higher than region's average snowfall. Close the openings for pipes and wiring, as the ingress of water and small animals or insects may cause equipment damage.
- Ensure the snow guard is kept free of snowfall exceeding 50cm.
- If the unit is expected to operate continuously for extended periods at outside air temperatures of 0°C or less, it is recommended to use a base heater to prevent ice build-up on the unit base (not applicable to PUMY series).
- Provide proper protection around outdoor units in places such as schools to avoid the risk of injury.
- A cooling tower and heat source water circuit should be a closed circuit so that water is not exposed to the atmosphere. If a tank is installed to ensure the circuit has enough water, minimise the contact with outside air so that the oxygen being dissolved in the water is 1mg/L or less.
- Install a strainer (50 mesh or more is recommended) on the water pipe inlet on the heat source unit.
- Interlock the heat source unit and water circuit pump.
- Note the following to prevent frozen burst pipes when the heat source unit is installed in an area where the ambient temperature can drop to 0°C or below:
  - o Keep the water circulating to prevent it from freezing when the temperature is 0°C or below.
  - o If the system is to be out of use for long periods, ensure water is purged from the unit.

4-2. Circulating Water

- Check the quality of the water in the heat source unit regularly, following the guidelines published by JRAIA (JRA-GL02-1994).
- A cooling tower and heat source water circuit should be a closed circuit so that water is not exposed to the atmosphere. If a tank is installed to ensure the circuit has enough water, minimise the contact with outside air so that the oxygen being dissolved in the water is 1mg/L or less.

4-3. Unit Characteristics

- Frequently repeating the Thermo ON and OFF on the indoor unit may destabilise the operating status of the outdoor unit.

4-4. Relevant Equipment

- Provide grounding in accordance with local regulations.

5. Precautions for control-related items

5-1. Product specification

- A consultation with BDT is required before installation of the MELANS system, particularly if the electricity charge apportioning function or energy-save function is to be utilised.
- The billing calculation for the AE-200E, AE-50E, AG-150A, EB-50GU-J, GB50ADA-J and TG2000A, as well as the calculation unit is based on a unique Mitsubishi Electric method which includes backup operation. The calculation is not based on a metering method, and does not include the input power consumption, and therefore should not be used for official business purposes. Note that the electric power consumption for the air conditioner is apportioned using the ratio corresponding to the operation status (output) of each indoor unit in this calculation method.
- In the apportioned billing function for the AE-200E, AE50E, AG-150A, EB-50GU-J and GB-50ADA-J, use separate watt-hour meters for A-control units, K-control units and packaged air conditioners for City Multi systems. It is recommended that an individual watt-hour meter is used for large-capacity indoor units (with two or more addresses).
- When using the energy-saving (peak cut) function on the AE-200E, AE-50E, AG-150A, EG-50GU-J or GB-50ADA-J, note that control is performed once per minute and therefore it may take some time to notice its full effect. Take appropriate measures such as lowering the criterion value. Power consumption may exceed limits if AE-200E, AE-50E, AG-150A, EG-50GU-J or GB-50ADA-J malfunctions or stops. A back-up solution should be available if necessary.
- The controllers cannot operate when the unit is OFF (no error). Ensure the power is ON to the indoor unit when operating the controllers.
- The interlocked control function on the AE-200E, AE50E, AG-150A, EB-50GU-J, GB-50ADA-J, PAC-YG66DCA-J or PAC-YG63MCA should not be used for the control of fire prevention or security, or any situation where it is primarily responsible for the protection of people's safety. Additional protection that allows ON/OFF operation using an external switch may be required in case of failure.

5-2. Installation Environment

- Surge protection for the transmission line may be required in areas susceptible to lightning strikes.
- Receivers for wireless remote controllers may be affected by lighting within the room. Leave a space of at least 1m between lighting sources and the receiver.
- When operating the auto-elevating panel using a wired remote controller, ensure the wired remote controller is installed in an area where it is not at risk of being damaged by the descending panel. It is recommended to use a wireless remote controller designed for use with elevating panels (sold separately).
- When installing the wired remote controller (switch box), ensure the following conditions are met:

oThe installation surface is flat

oThe controller is positioned where it can detect an accurate room temperature. Install the controller in a place where:

  - it is not subject directly to a heat source (direct sunlight and indoor unit airflow will affect the accuracy of the average room temperature reading)
  - an average room temperature can be detected
  - no other wires are present near the temperature sensor

- To prevent unauthorised access, always use a security device, such as a VPN router when connecting the AE-200E, AE-50E, AG-150A, EB-50GU-J, GB50ADA-J or TG-2000A to the internet.

Maintenance Equipment

Maintenance cycle [Note that maintenance cycle does not mean guarantee period.]

The following tables are applicable when using equipment under the conditions below.

- Normal use without frequent START/STOPs (The number of START/STOPs is assumed to be less than 6 times per hour in normal use.)
- Operating hours are assumed to be 10 hours per day/2500 hours per year.

If the following conditions are met, the equipment may not be used, or the "maintenance cycle" and "replacement intervals" may be shortened.

- When equipment is used in an environment where the temperature and humidity are high or change dramatically
- When equipment is used in an environment where the power supply fluctuations (the distortion of voltage, frequency, and waveform) are large (only within the allowable range)
- When equipment is used in an environment where the unit may be subject to vibration or mechanical shock
- When equipment is used in an environment where dust, salt, toxic gases such as sulfur dioxide and hydrogen sulfide, and oil mist are present
- When equipment starts/stops frequently and operates for a long time (24-hour air conditioning operation)

Table 1. Maintenance cycle

Major components	Checking cycle	Maintenance cycle	Major components	Checking cycle	Maintenance cycle
Compressor	1 year	20,000 hours	Expansion valve	1 year	20,000 hours
Motor (Fan, Louver, drain pump)		20,000 hours	Valve (solenoid valve, four-way valve)		20,000 hours
Bearing		15,000 hours	Sensor (thermistor, presser sensor)		5 years
Electric board		25,000 hours	Drain pan		8 years
Heat exchanger		5 years			

Note1 This table shows major components. Refer to the maintenance contract for details.
Note2 This maintenance cycle shows a period in which products are expected to require no maintenance. Use this cycle for planning maintenance (budgeting the maintenance expense etc.) Checking/ Maintenance cycle may be shorter than the one on this table depending on the contents of maintenance check contract.

- Sudden unpredictable accidents may occur even if a check-up is performed.

Replacement cycle of consumable components [Note that replacement cycle does not mean guarantee period.]

Table 2. Replacement cycle

Major components	Checking cycle	Replacement cycle
Long-life filter	1 year	5 years
High-performance filter		1 year
Fan belt		5,000 hours
Smoothing capacitor		10 years
Fuse		10 years
Crank case heater		8 years

Note1 This table shows major components. Refer to the maintenance contract for details.
Note2 This replacement cycle shows a period in which products are expected to require no replacements. Use this cycle for planning maintenance (budgeting expenses for replacing equipments etc.)

B.S. Salt Protection Specifications
City Multi VRF Outdoor Units

Name	Base material	PUHY, PURY		Surface treatment	Paint thickness	
		YLM	YLM-BS			
		Standard	Salt damage protection		External	Internal
Bottom frame	Alloyed galvanized sheet	•	•	Polyester resin coating	70μm or more	70μm or more
Front panel	Galvanized sheet	•		Polyester resin coating	15μm or more	5μm or more
			•	Polyester resin coating	85μm or more	75μm or more
Pillar	Alloyed galvanized sheet	•		Polyester resin coating	30μm or more	
			•	Polyester resin coating	70μm or more	70μm or more
Compressor cover	Galvanized sheet	•		No treatment		
	Galvanized aluminum sheet		•	Polyester resin coating	70μm or more	70μm or more
Fin guard	Steel wires	•	•	Polyethylene resin (Weather proof)	300μm or more	300μm or more
Fan guard & Drum	Plastic	•	•	Polypropylene resin (Weather proof)		
Fan	Plastic	•	•	Acrylics nitril styrene resin		
Motor	Frame; Spcc	•	•	Zinc plating filming	8μm or more	
	Shaft; S35C	•	•	Rust prevention colored coating		
Motor support	Galvanized sheet	•		No treatment		
			•	Polyester resin coating	70μm or more	70μm or more
Heat exchanger	Aluminum plate	•		Cellulose series and urethane series resin coating	1μm or more	
(Only fin)			•	Cellulose series and urethane series resin coating	3μm or more	
Electrical parts box	Galvanized sheet	•		No treatment		
	Galvanized aluminum sheet		•	Polyester resin coating	70μm or more	
Printed circuit board	Epoxy resin	•		Polyurethane coating	10μm or more	
			•	Polyurethane coating	10μm or more	10μm or more
Screw	Steel for screws	•	•	Zinc-nickel alloy plating + Geomet filming		

CAUTION:

1 Do not position the outdoor in a direct sea breeze.

2 Don't protect the unit from rain. (Rain will clean the salt from the coil).

3 Install the outdoor unit level to allow condensate drainage.

4 Wash the outdoor unit regularly.

5 Repair any scratches on the panels.

6 Inspect regularly. Paint or change parts as required.

FM33568 / ISO 9001;2008

The Air Conditioning & Refrigeration Systems Works acquired ISO 9001 certification under Series 9000 of the International Standard Organization (ISO) based on a review of Quality management for the production of refrigeration and air conditioning equipment.

ISO Authorization System
The ISO 9000 series is a plant authorization system relating to quality management as stipulated by the ISO. ISO 9001 certifies quality management based on the "design, development, production, installation and auxiliary services" for products built at an authorized plant.

EC97J1227 051

The Air Conditioning & Refrigeration Systems Works acquired environmental management system standard ISO 14001 certification.

The ISO 14000 series is a set of standards applying to environmental protection set by the International Standard Organization (ISO).
Registered on March 10, 1998.

⚠ Warning

■ Do not use refrigerant other than the type indicated in the manuals provided with the unit and on the nameplate.
- Doing so may cause the unit or pipes to burst, or result in explosion or fire during use, during repair, or at the time of disposal of the unit.
- It may also be in violation of applicable laws.
- MITSUBISHI ELECTRIC CORPORATION cannot be held responsible for malfunctions or accidents resulting from the use of the wrong type of refrigerant.

For more information on Mitsubishi Electric Heat Pumps, please call our customer service team on **0800 784 382**

MITSUBISHI ELECTRIC

www.mitsubishi-electric.co.nz

Black Diamond Technologies

Exclusive distributor of Mitsubishi Electric products in New Zealand.

WELLINGTON
HEAD OFFICE

1 Parliament Street
PO Box 30772
Lower Hutt 5040

Phone (04) 560 9147
Fax (04) 560 9133

AUCKLAND
BRANCH

Unit 1, 4 Walls Road
PO Box 12726
Penrose, Auckland 1642

Phone (09) 526 9347
Fax (09) 526 9369

CHRISTCHURCH
BRANCH

44 Halwyn Drive
PO Box 16904
Hornby, Christchurch 8441

Phone (03) 341 2837
Fax (03) 341 2838

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